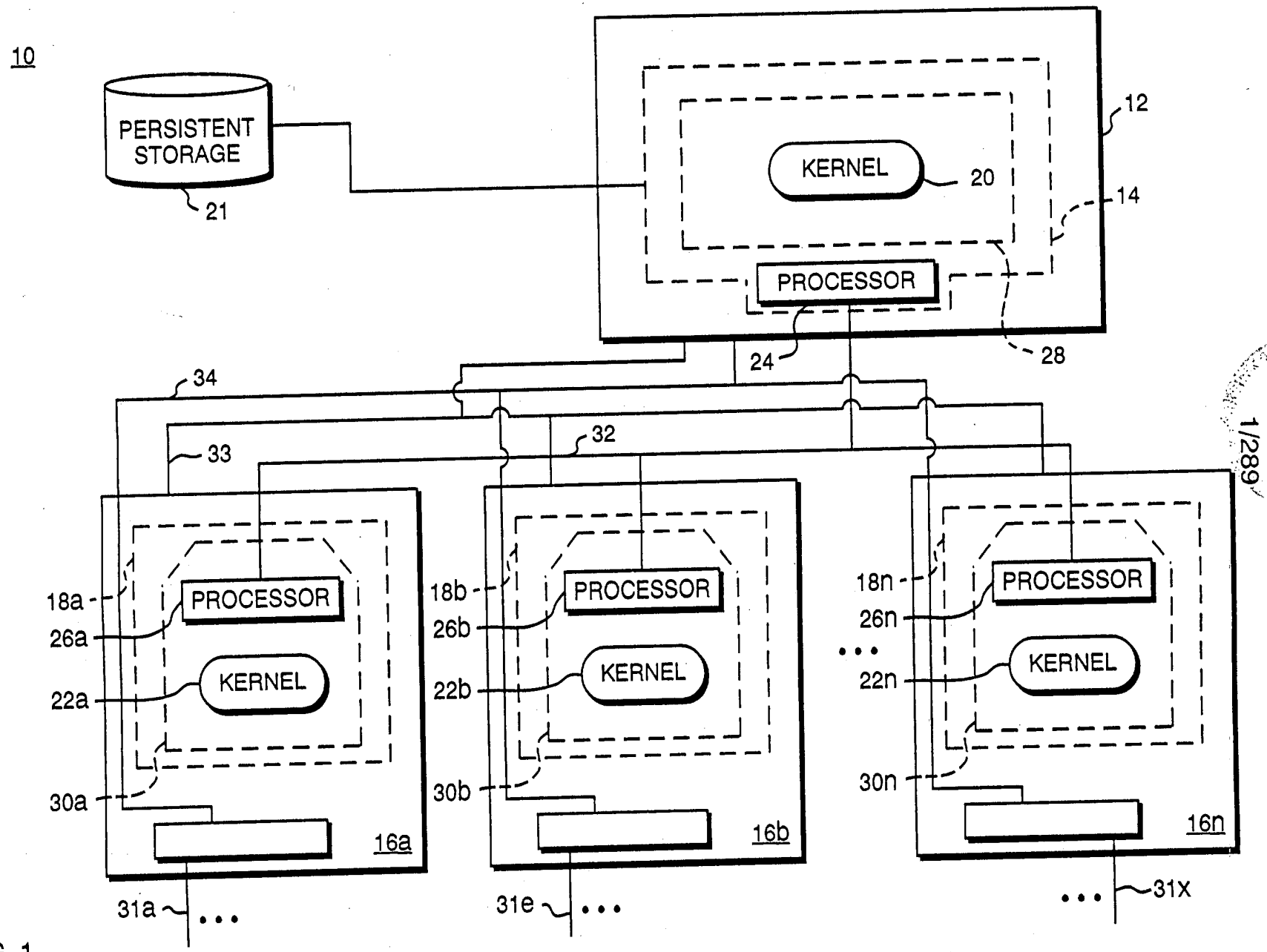

10
PERSISTENT STORAGE
21
KERNEL
20
12
14
PROCESSOR
24
28
34
33
32
18a
PROCESSOR
26a
KERNEL
22a
30a
16a
18b
PROCESSOR
26b
KERNEL
22b
30b
16b
18n
PROCESSOR
26n
KERNEL
22n
30n
16n
31a
31e
31X

FIG. 1

1/289

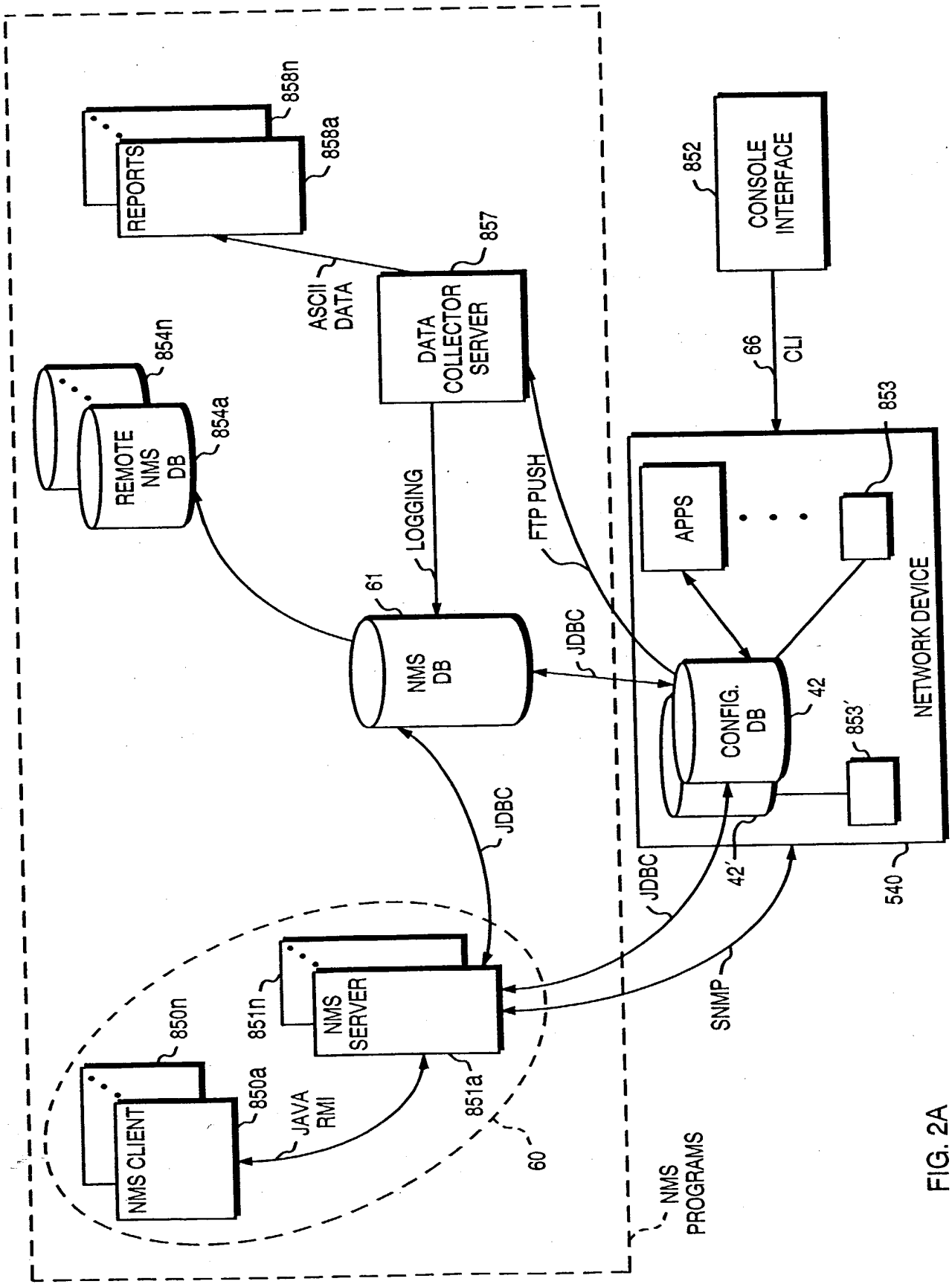

REPORTS
858n
858a
ASCII DATA
DATA COLLECTOR SERVER
857
CONSOLE INTERFACE
852
66
CLI
853
APPS
NETWORK DEVICE
REMOTE NMS DB
854n
854a
LOGGING
FTP PUSH
61
NMS DB
JDBC
CONFIG. DB
42
853'
42'
540
JDBC
JDBC
SNMP
NMS SERVER
851n
851a
850n
850a
NMS CLIENT
JAVA RMI
60
NMS PROGRAMS

FIG. 2A

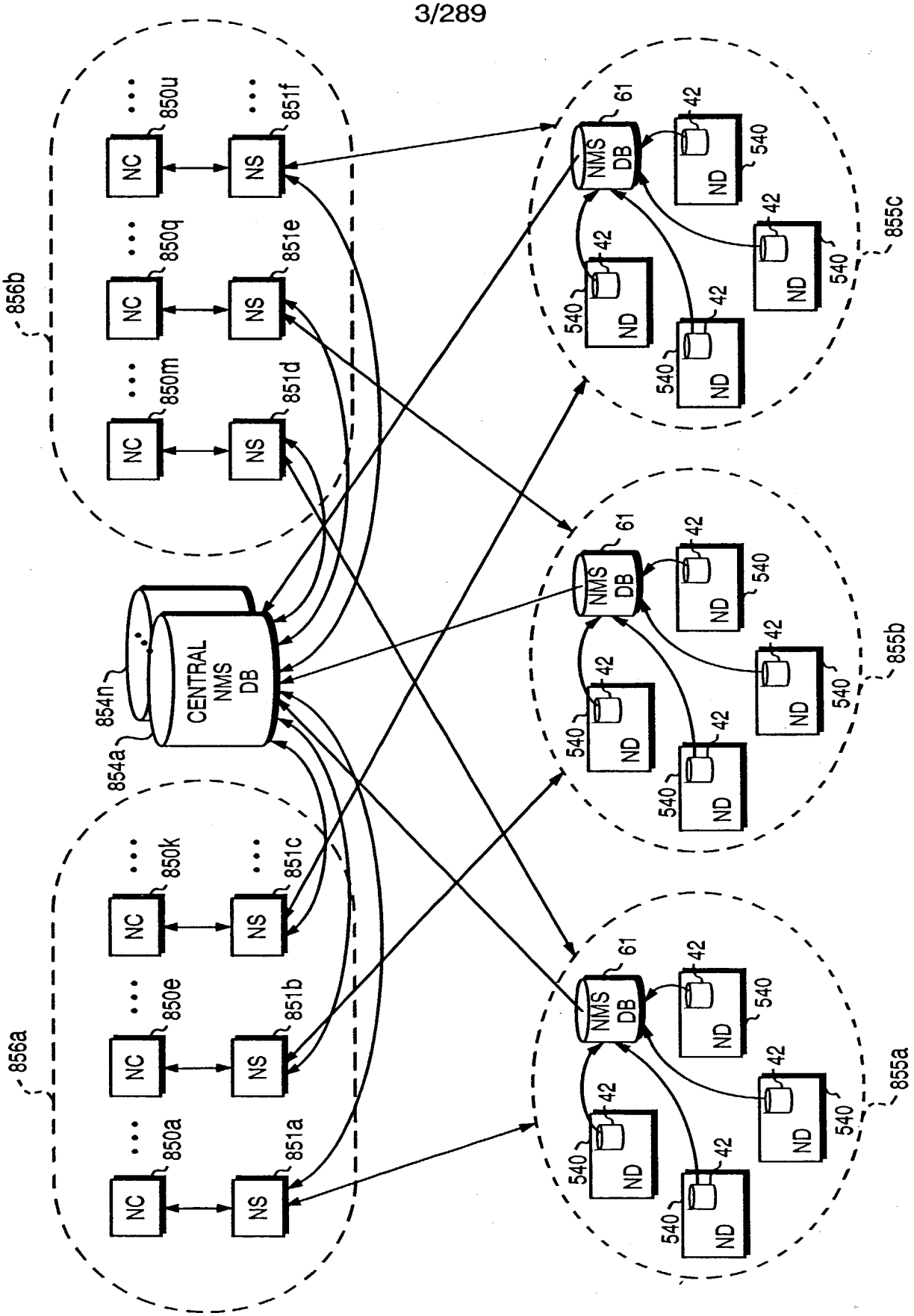

856a
856b
855a
855b
855c
CENTRAL NMS DB
854a
854n
NC
NS
NMS DB
ND
540
42
61
850a
850e
850k
850m
850q
850u
851a
851b
851c
851d
851e
851f

FIG. 2B

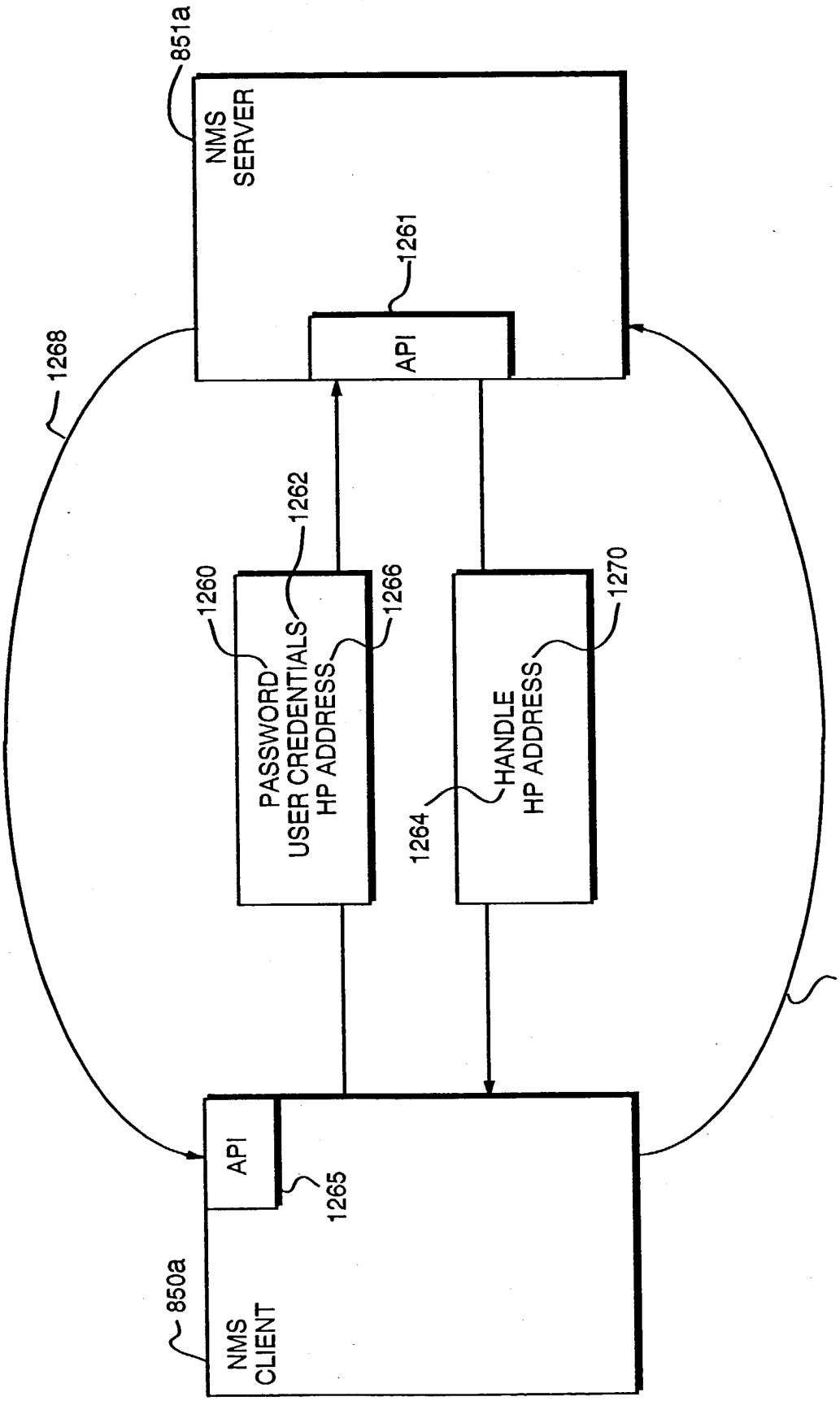

851a
NMS SERVER
1261
API
1268
1262
1260
PASSWORD
USER CREDENTIALS
HP ADDRESS
1266
1270
HANDLE
HP ADDRESS
1264
1272
API
1265
850a
NMS CLIENT

FIG. 2C

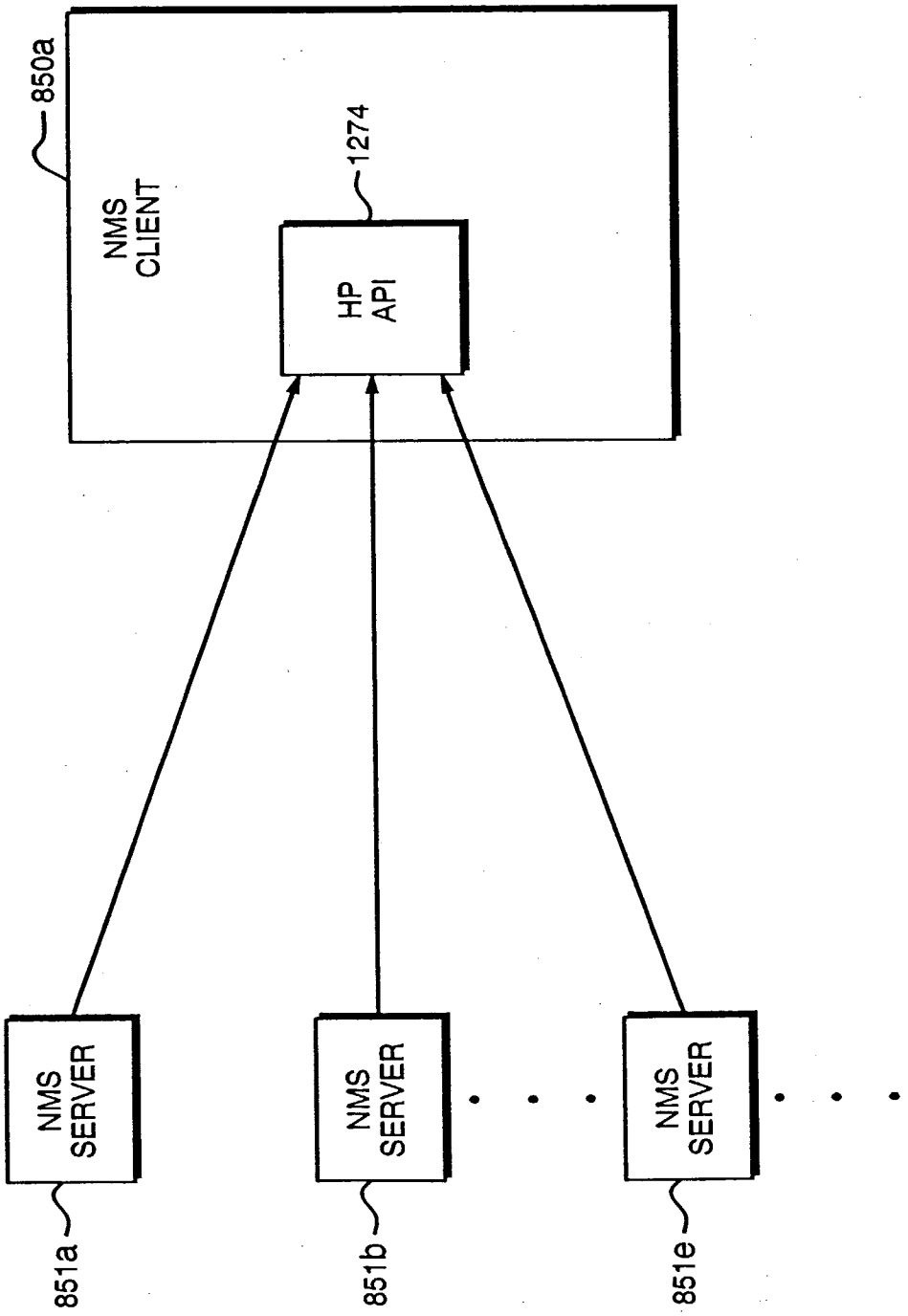

850a
NMS CLIENT
1274
HP API
NMS SERVER
NMS SERVER
NMS SERVER
851a
851b
851e

FIG. 2D

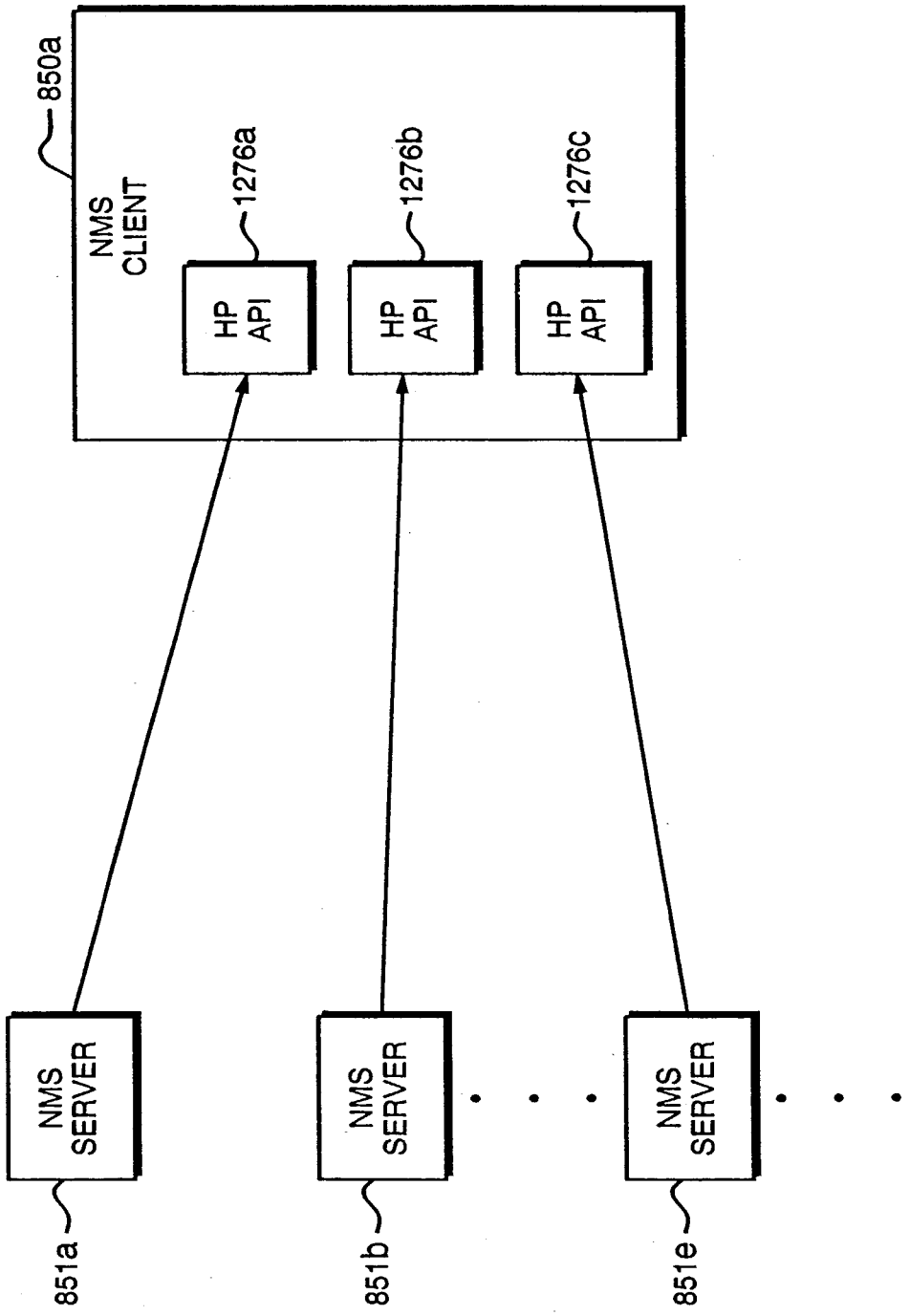

850a
NMS CLIENT
1276a
1276b
1276c
HP API
HP API
HP API
NMS SERVER
NMS SERVER
NMS SERVER
851a
851b
851e

FIG. 2E

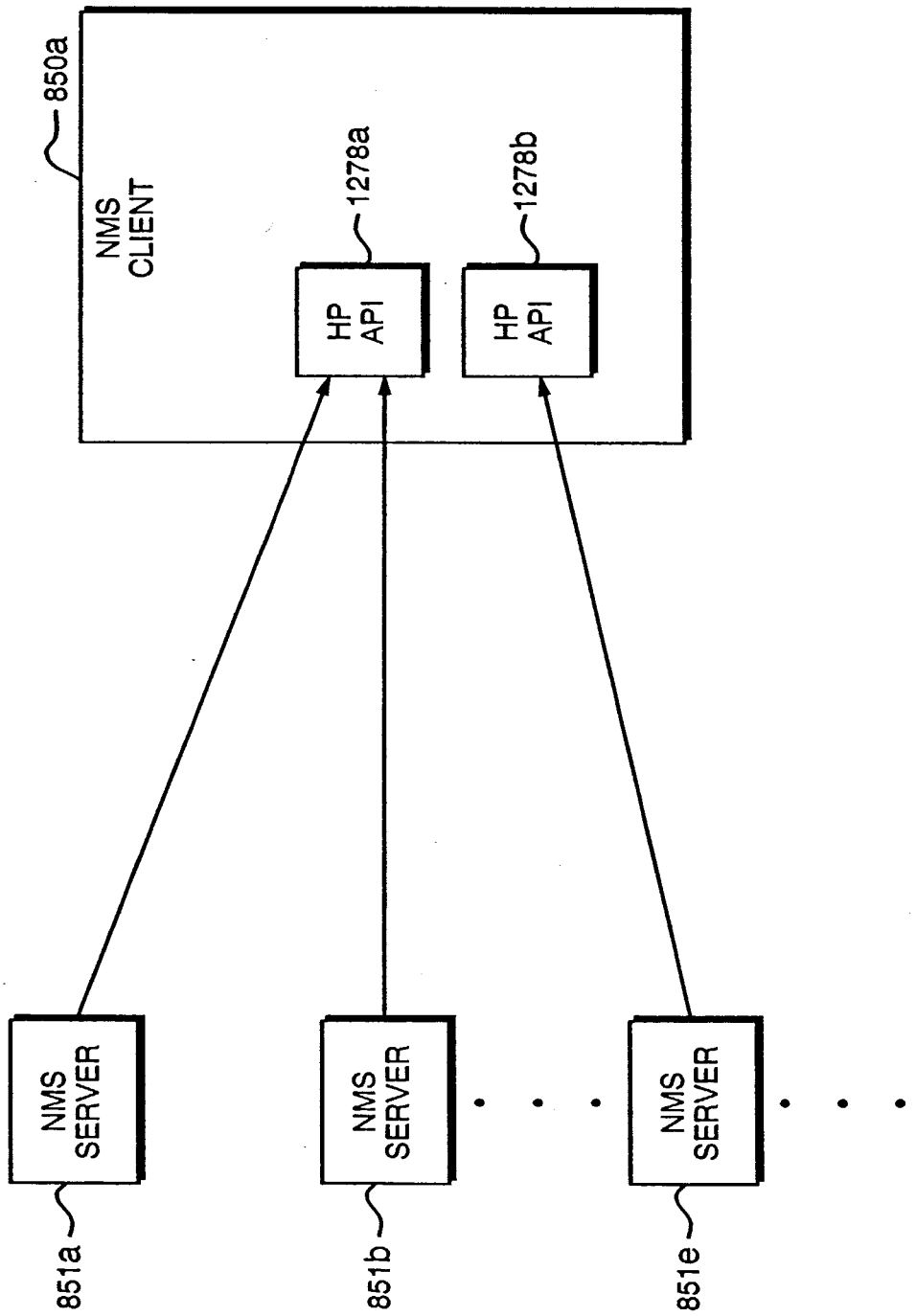

850a
NMS CLIENT
1278a
1278b
HP API
HP API
NMS SERVER
NMS SERVER
NMS SERVER
851a
851b
851e

FIG. 2F

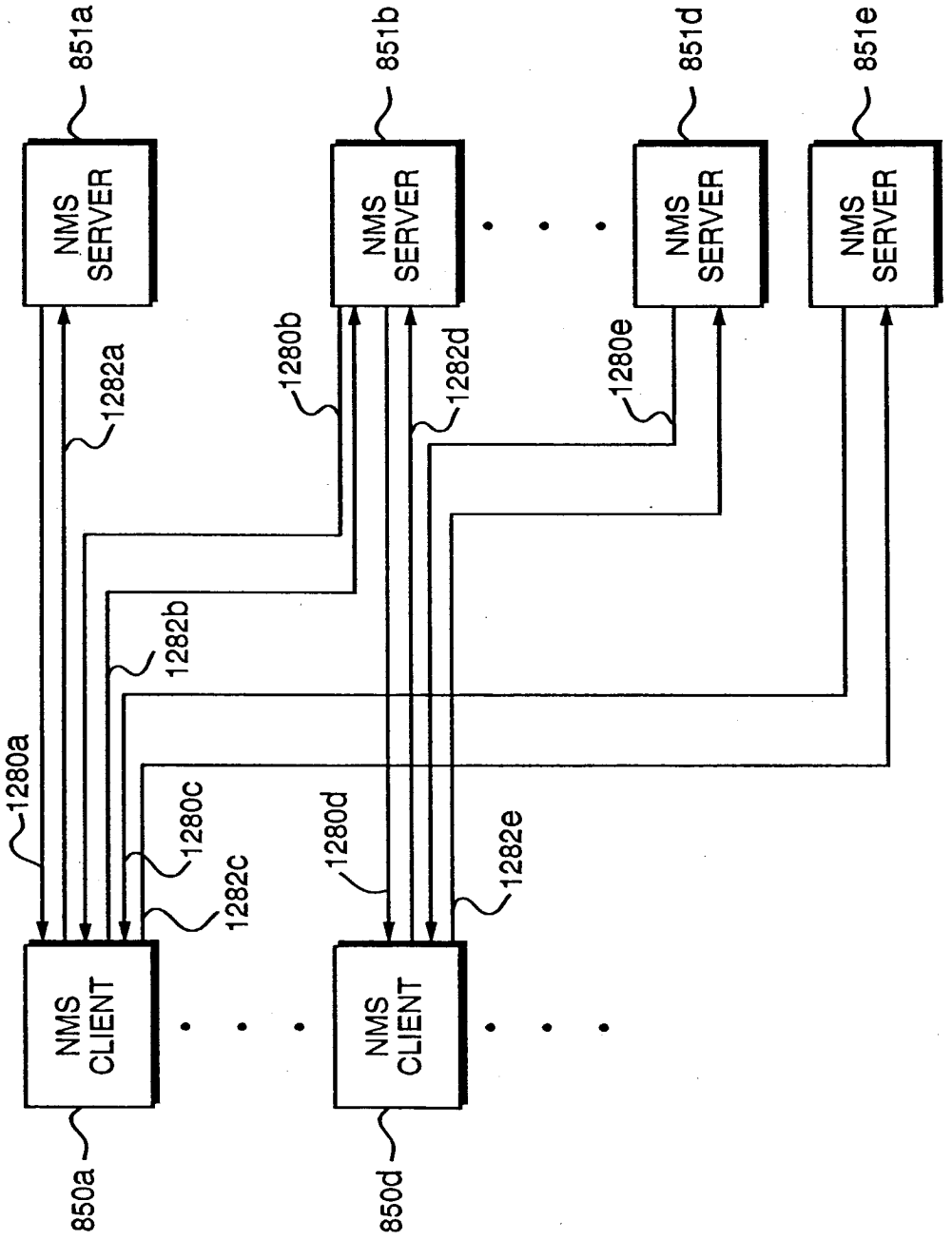

851a
851b
851d
851e
NMS SERVER
NMS SERVER
NMS SERVER
NMS SERVER
1282a
1280b
1282d
1280e
1282b
1280a
1280c
1282c
1280d
1282e
NMS CLIENT
NMS CLIENT
850a
850d

FIG. 2G

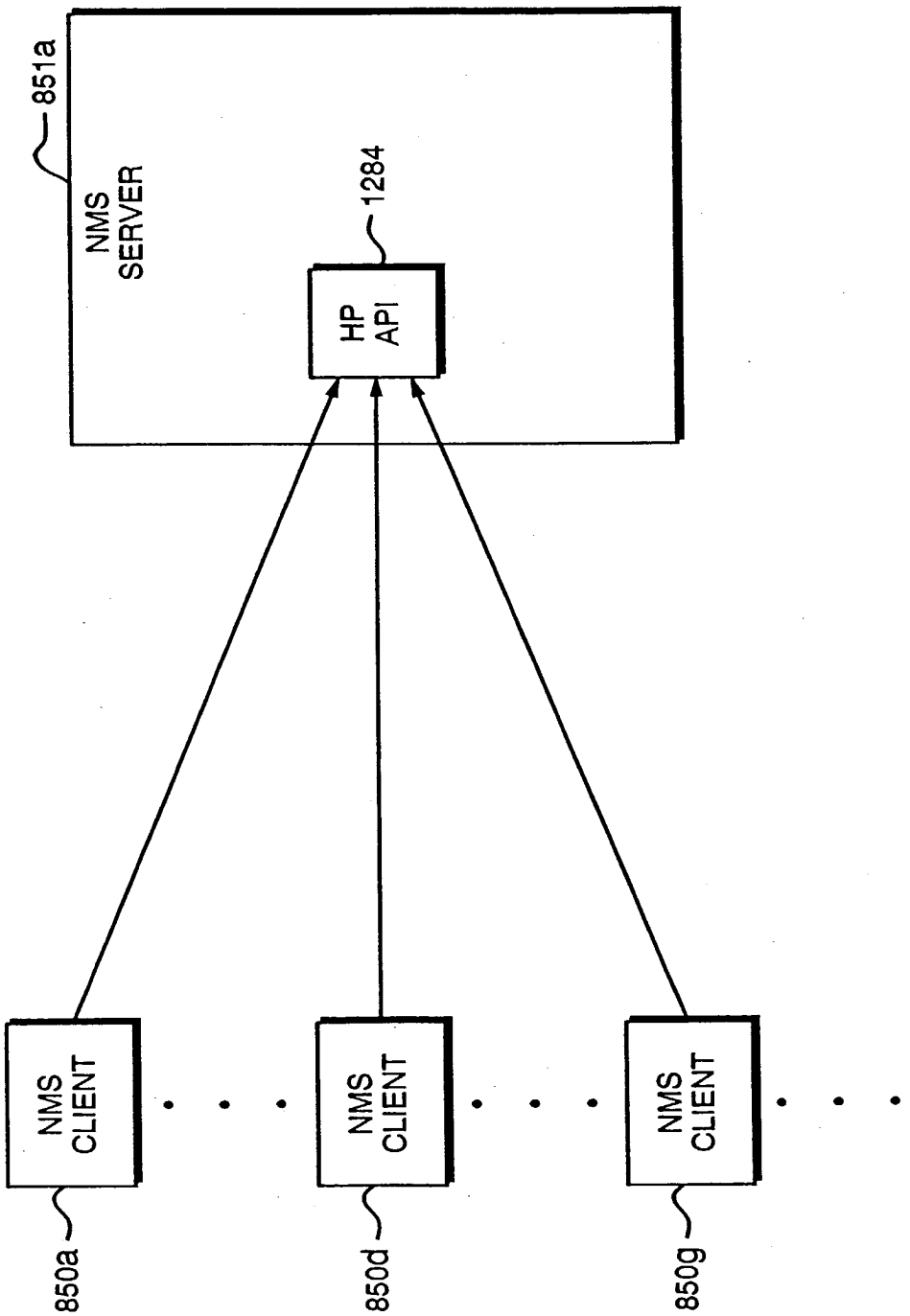

851a
NMS SERVER
1284
HP API
NMS CLIENT
NMS CLIENT
NMS CLIENT
850a
850d
850g

FIG. 2H

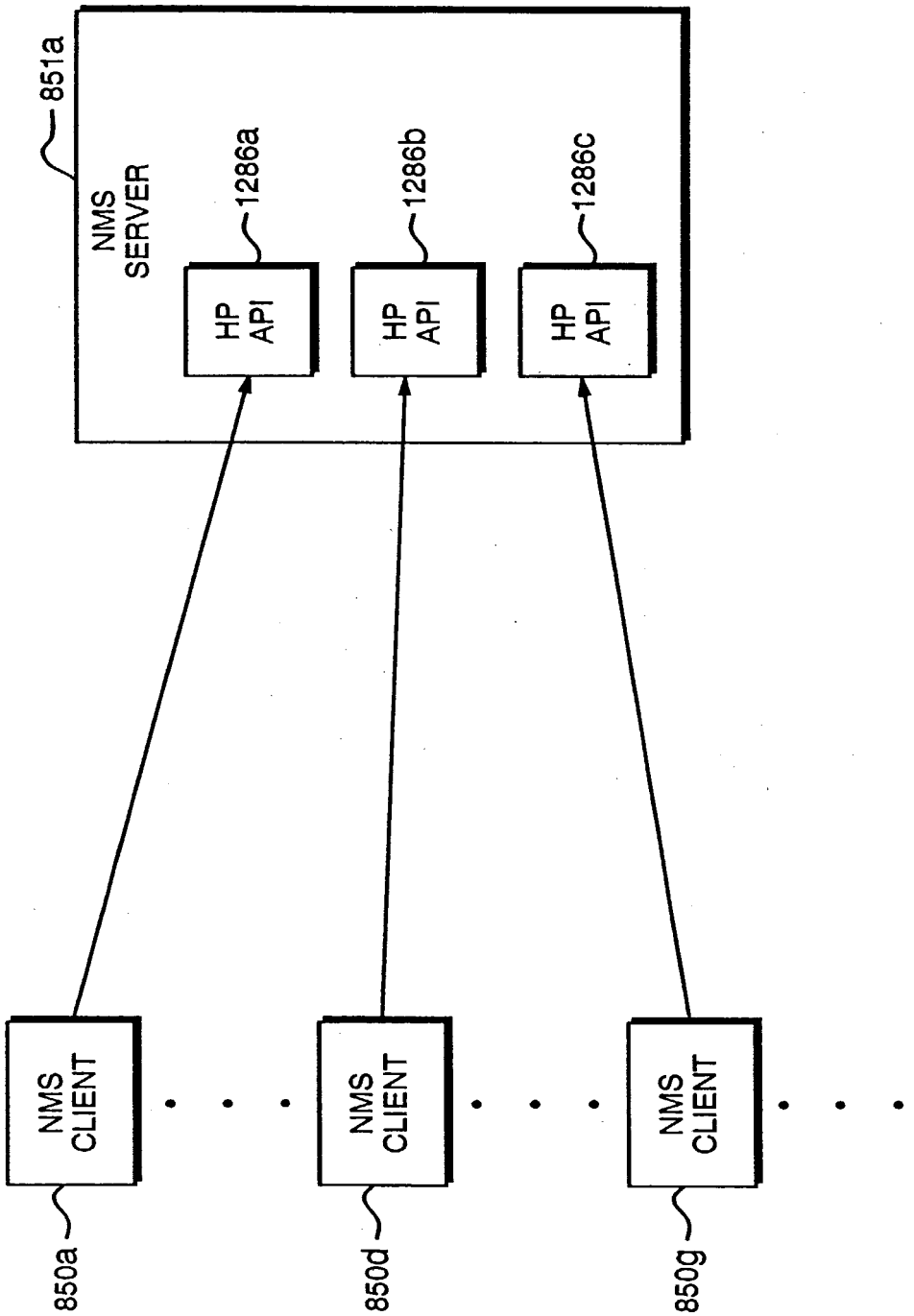

851a
NMS SERVER
1286a
1286b
1286c
HP API
HP API
HP API
NMS CLIENT
NMS CLIENT
NMS CLIENT
850a
850d
850g

FIG. 2I

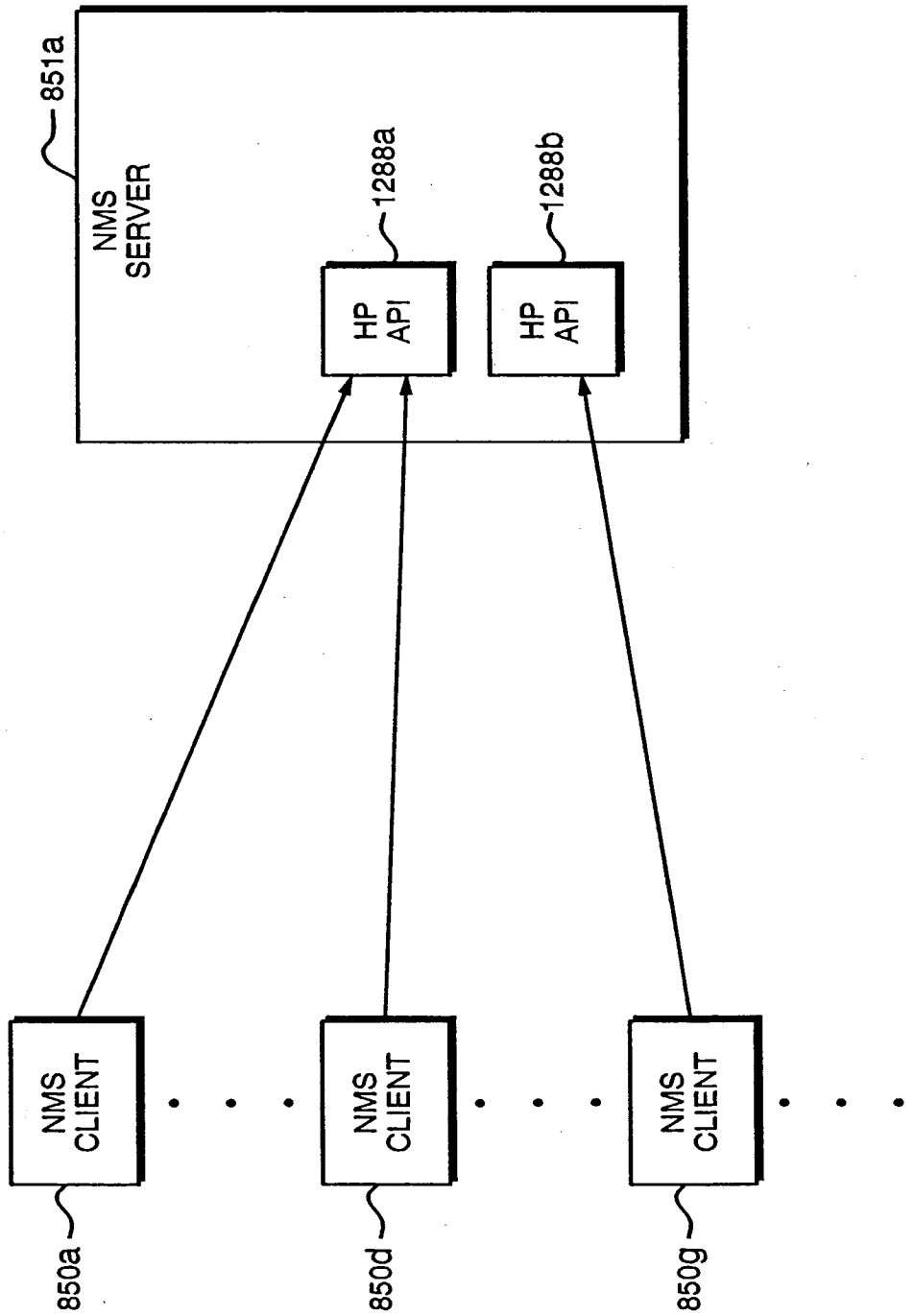

851a
NMS SERVER
1288a
1288b
HP API
HP API
NMS CLIENT
NMS CLIENT
NMS CLIENT
850a
850d
850g

FIG. 2J

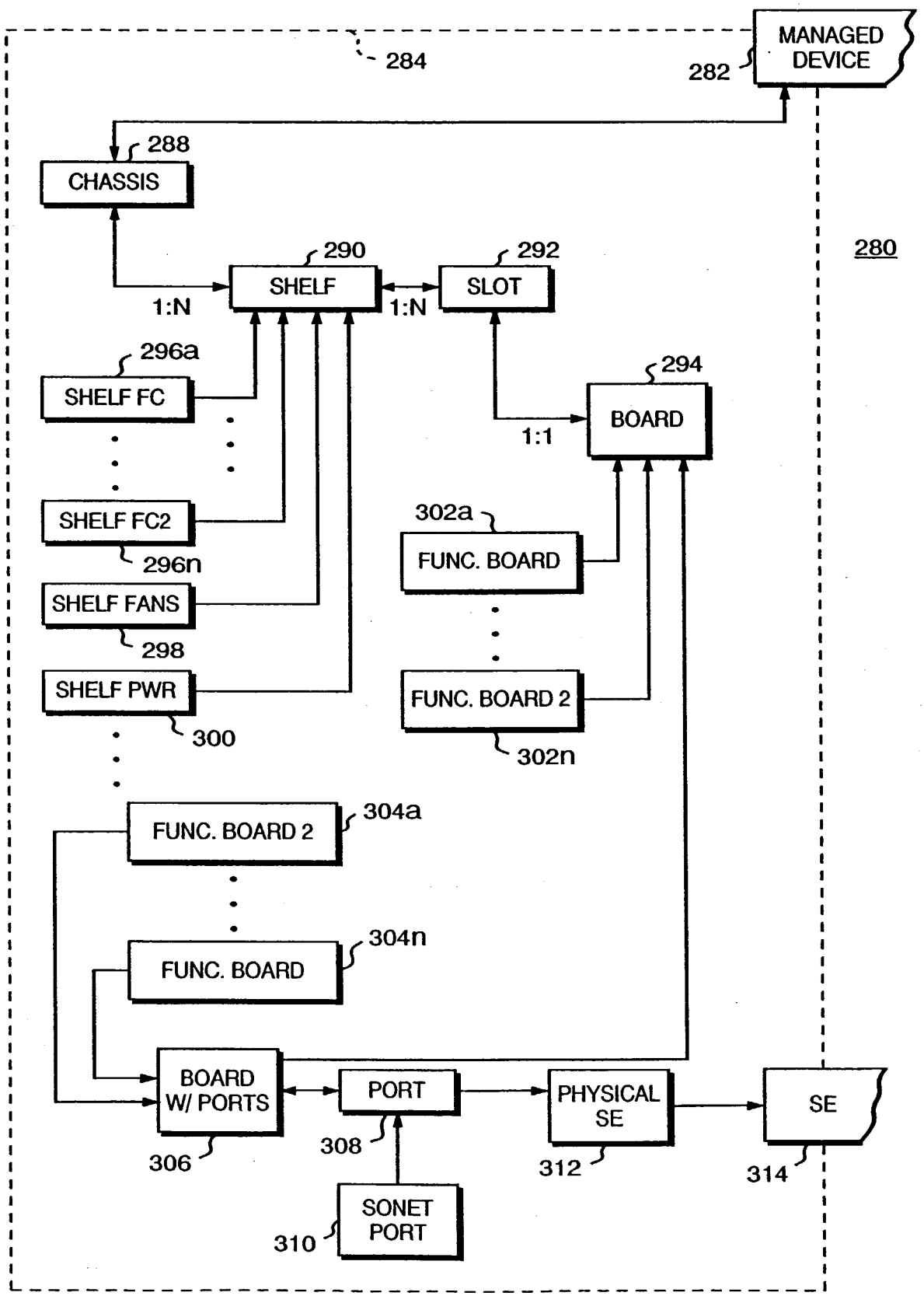

MANAGED DEVICE
282
284
280
CHASSIS
288
SHELF
290
SLOT
292
1:N
1:N
SHELF FC
296a
SHELF FC2
296n
SHELF FANS
298
SHELF PWR
300
BOARD
294
1:1
FUNC. BOARD
302a
FUNC. BOARD 2
302n
FUNC. BOARD 2
304a
FUNC. BOARD
304n
BOARD W/ PORTS
306
PORT
308
SONET PORT
310
PHYSICAL SE
312
SE
314

FIG. 3A

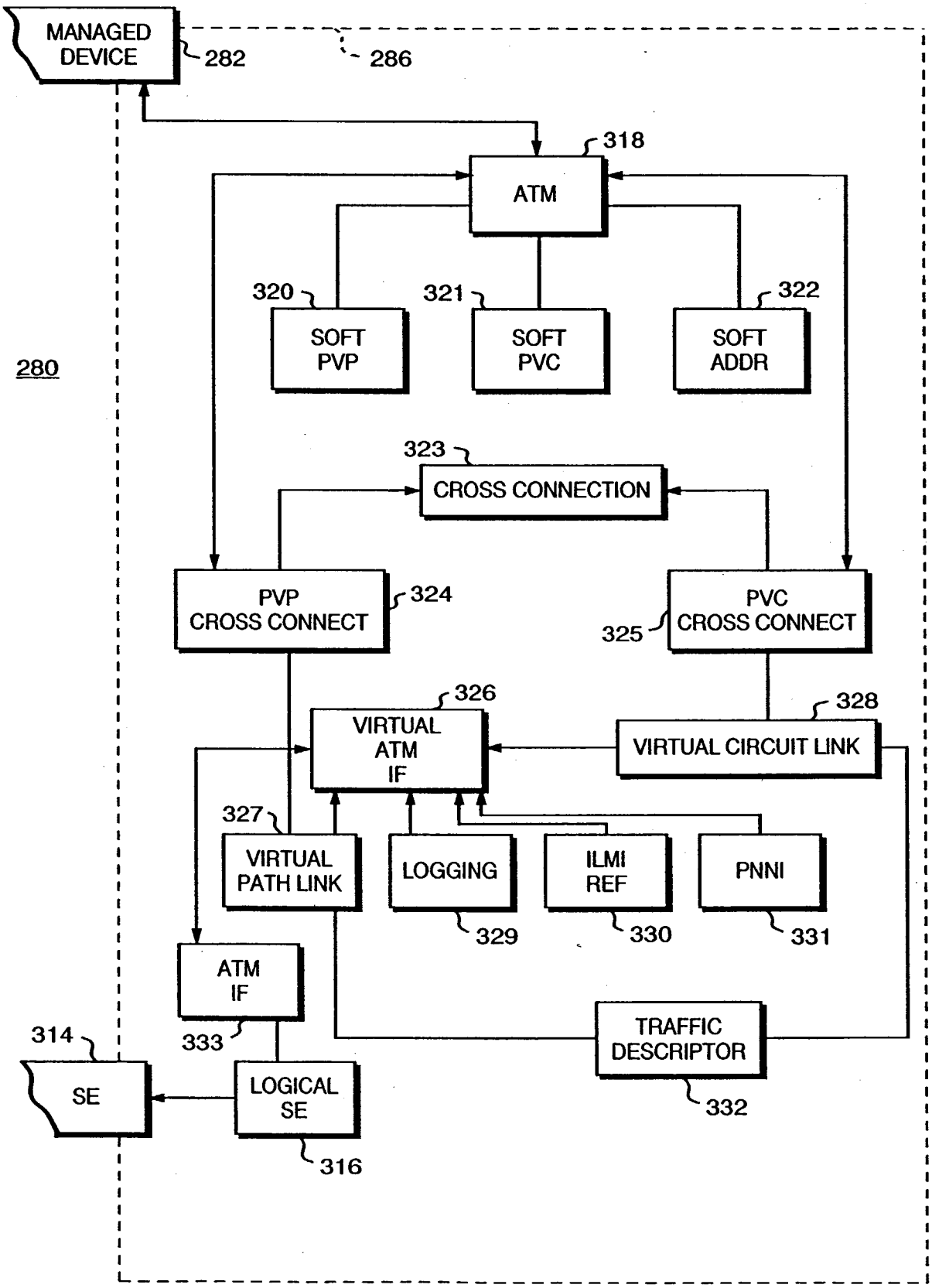

MANAGED DEVICE
282
286
318
ATM
320
SOFT PVP
321
SOFT PVC
322
SOFT ADDR
280
323
CROSS CONNECTION
PVP CROSS CONNECT
324
325
PVC CROSS CONNECT
326
VIRTUAL ATM IF
328
VIRTUAL CIRCUIT LINK
327
VIRTUAL PATH LINK
LOGGING
329
ILMI REF
330
PNNI
331
ATM IF
333
TRAFFIC DESCRIPTOR
332
314
SE
LOGICAL SE
316

FIG. 3B

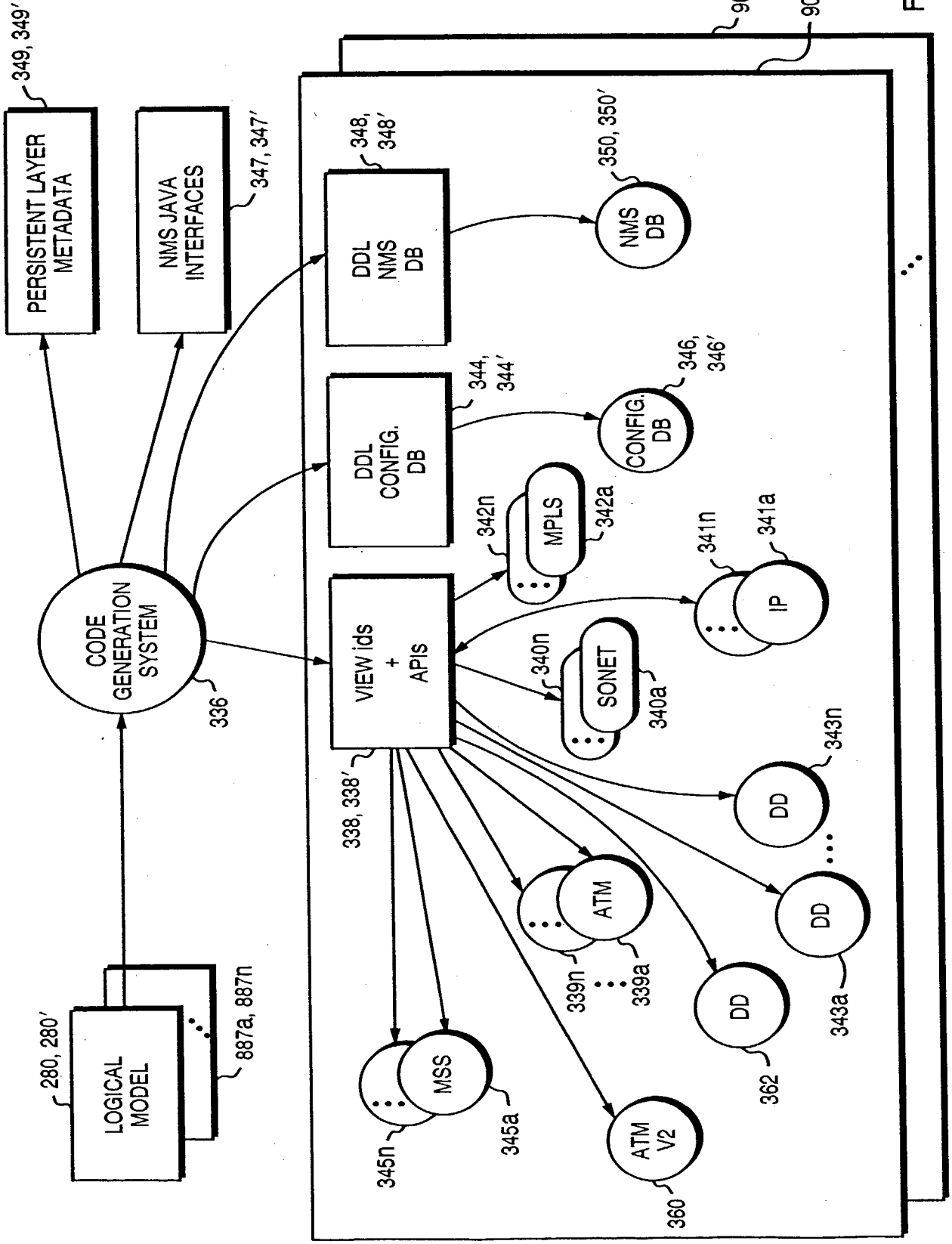

901n
901a
349, 349'
PERSISTENT LAYER METADATA
NMS JAVA INTERFACES
347, 347'
348, 348'
DDL NMS DB
350, 350'
NMS DB
DDL CONFIG. DB
344, 344'
CONFIG. DB
346, 346'
342n
MPLS
342a
341n
IP
341a
CODE GENERATION SYSTEM
336
VIEW ids + APIs
340n
SONET
340a
338, 338'
DD
343n
ATM
339n
339a
DD
DD
343a
MSS
345n
345a
DD
362
ATM V2
360
280, 280'
LOGICAL MODEL
887a, 887n

FIG. 3C

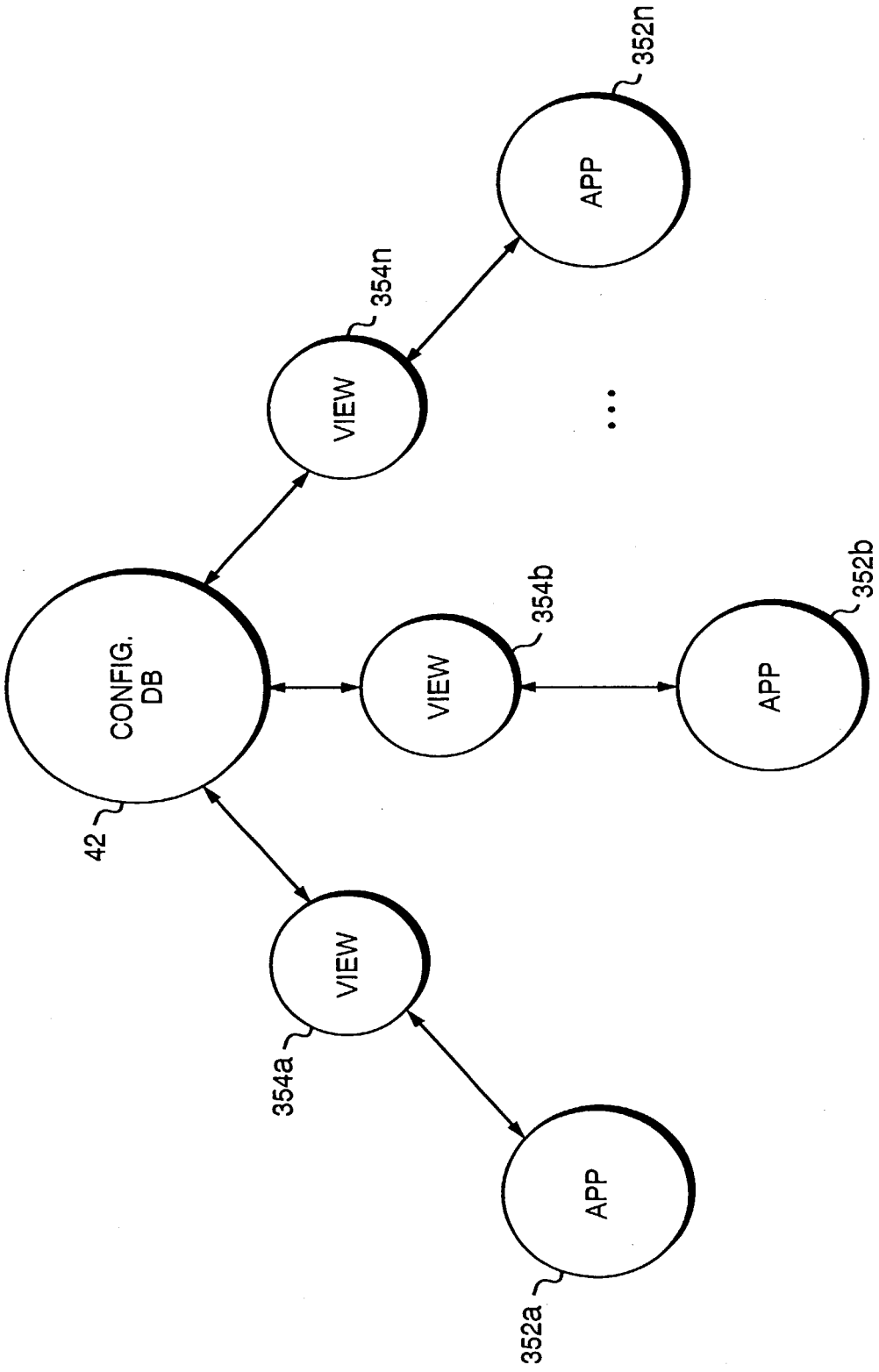

CONFIG. DB
42
VIEW
354a
VIEW
354b
VIEW
354n
APP
352a
APP
352b
APP
352n

FIG. 3D

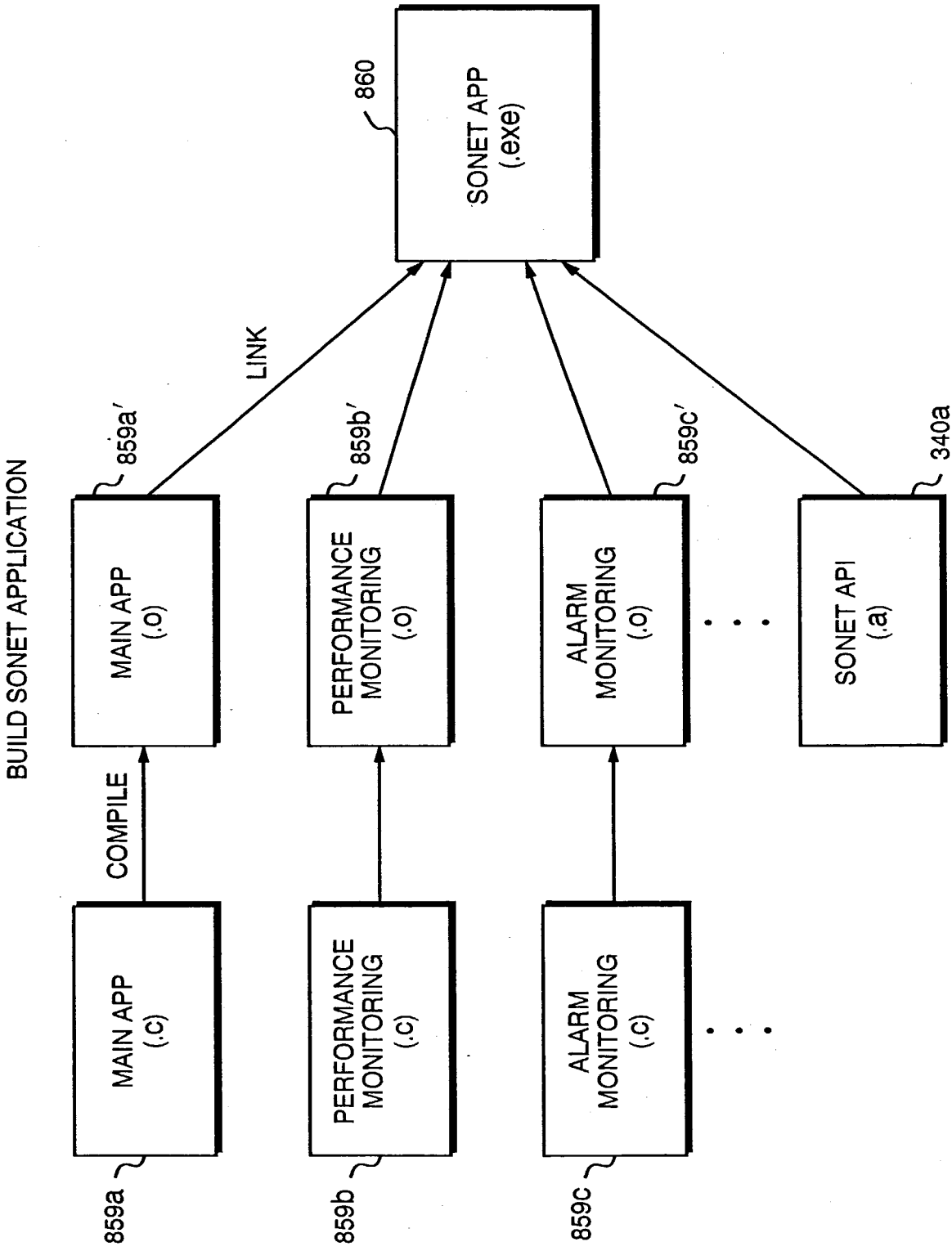

BUILD SONET APPLICATION
COMPILE
LINK
MAIN APP (.c)
PERFORMANCE MONITORING (.c)
ALARM MONITORING (.c)
MAIN APP (.o)
PERFORMANCE MONITORING (.o)
ALARM MONITORING (.o)
SONET API (.a)
SONET APP (.exe)
859a
859b
859c
859a'
859b'
859c'
340a
860

FIG. 3E

09830510 .070501

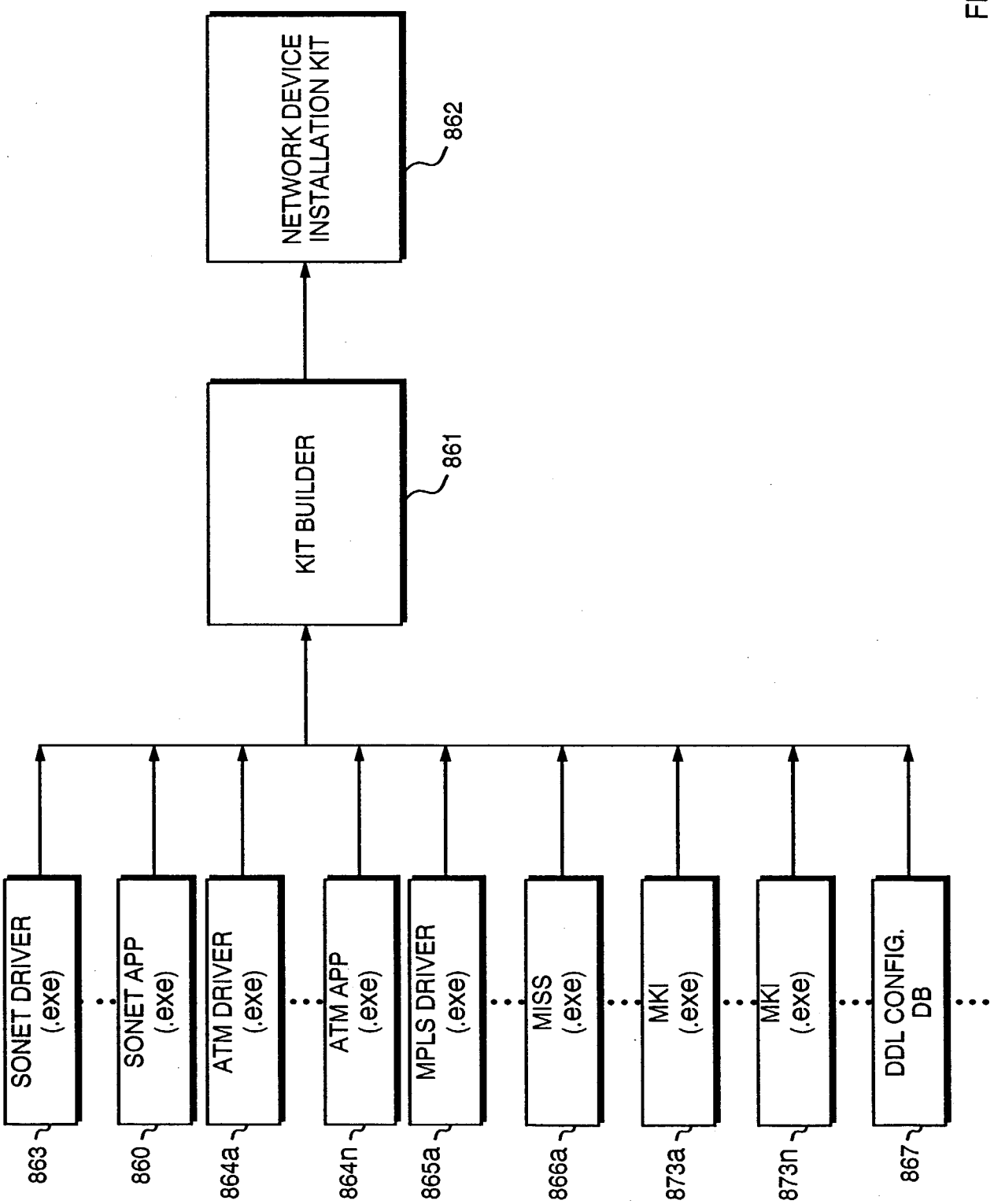


FIG. 3F

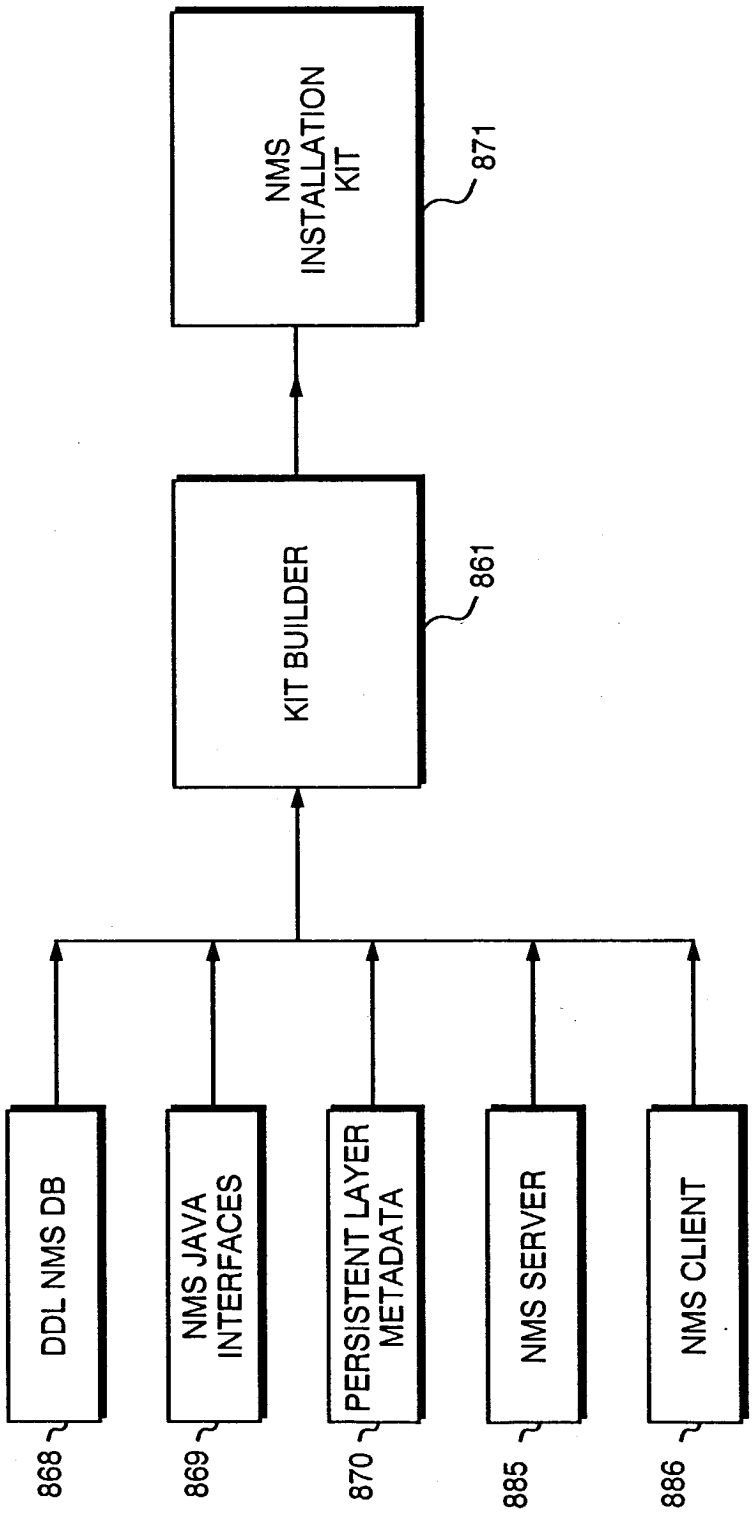

NMS INSTALLATION KIT
871
KIT BUILDER
861
DDL NMS DB
NMS JAVA INTERFACES
PERSISTENT LAYER METADATA
NMS SERVER
NMS CLIENT
868
869
870
885
886

FIG. 3G

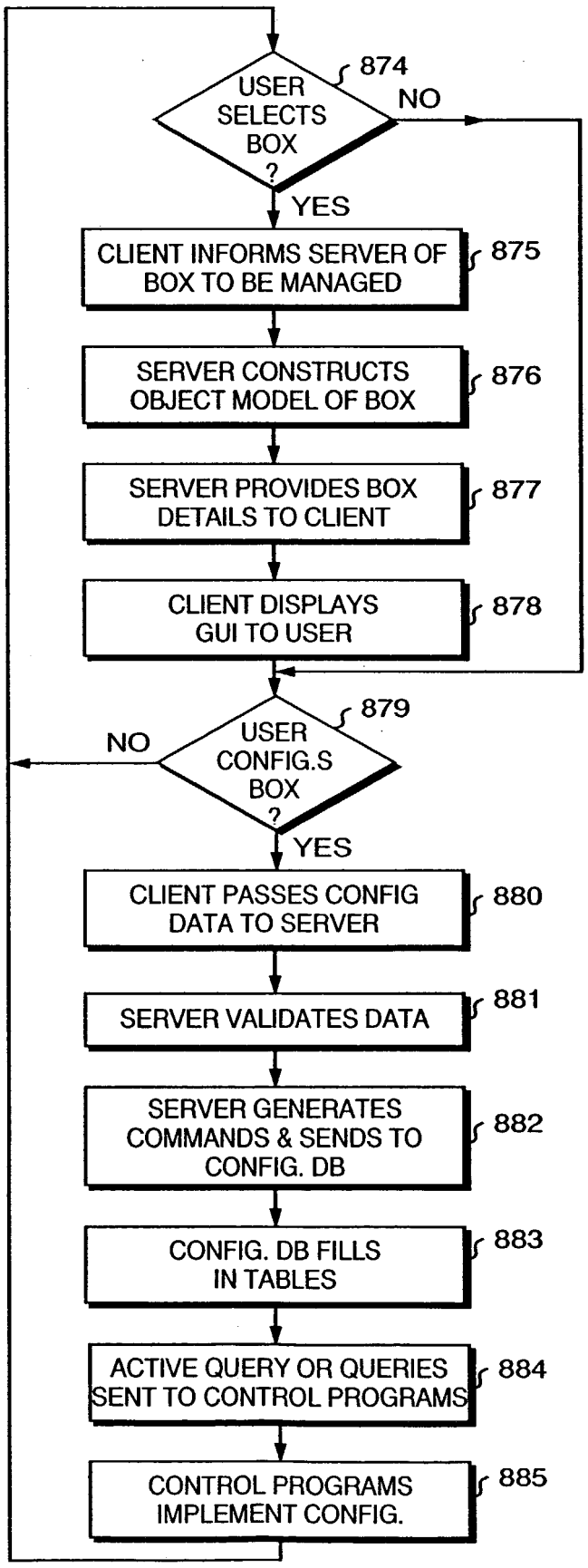

USER SELECTS BOX ?
874
NO
YES
CLIENT INFORMS SERVER OF BOX TO BE MANAGED
875
SERVER CONSTRUCTS OBJECT MODEL OF BOX
876
SERVER PROVIDES BOX DETAILS TO CLIENT
877
CLIENT DISPLAYS GUI TO USER
878
USER CONFIG.S BOX ?
879
NO
YES
CLIENT PASSES CONFIG DATA TO SERVER
880
SERVER VALIDATES DATA
881
SERVER GENERATES COMMANDS & SENDS TO CONFIG. DB
882
CONFIG. DB FILLS IN TABLES
883
ACTIVE QUERY OR QUERIES SENT TO CONTROL PROGRAMS
884
CONTROL PROGRAMS IMPLEMENT CONFIG.
885

FIG. 3H

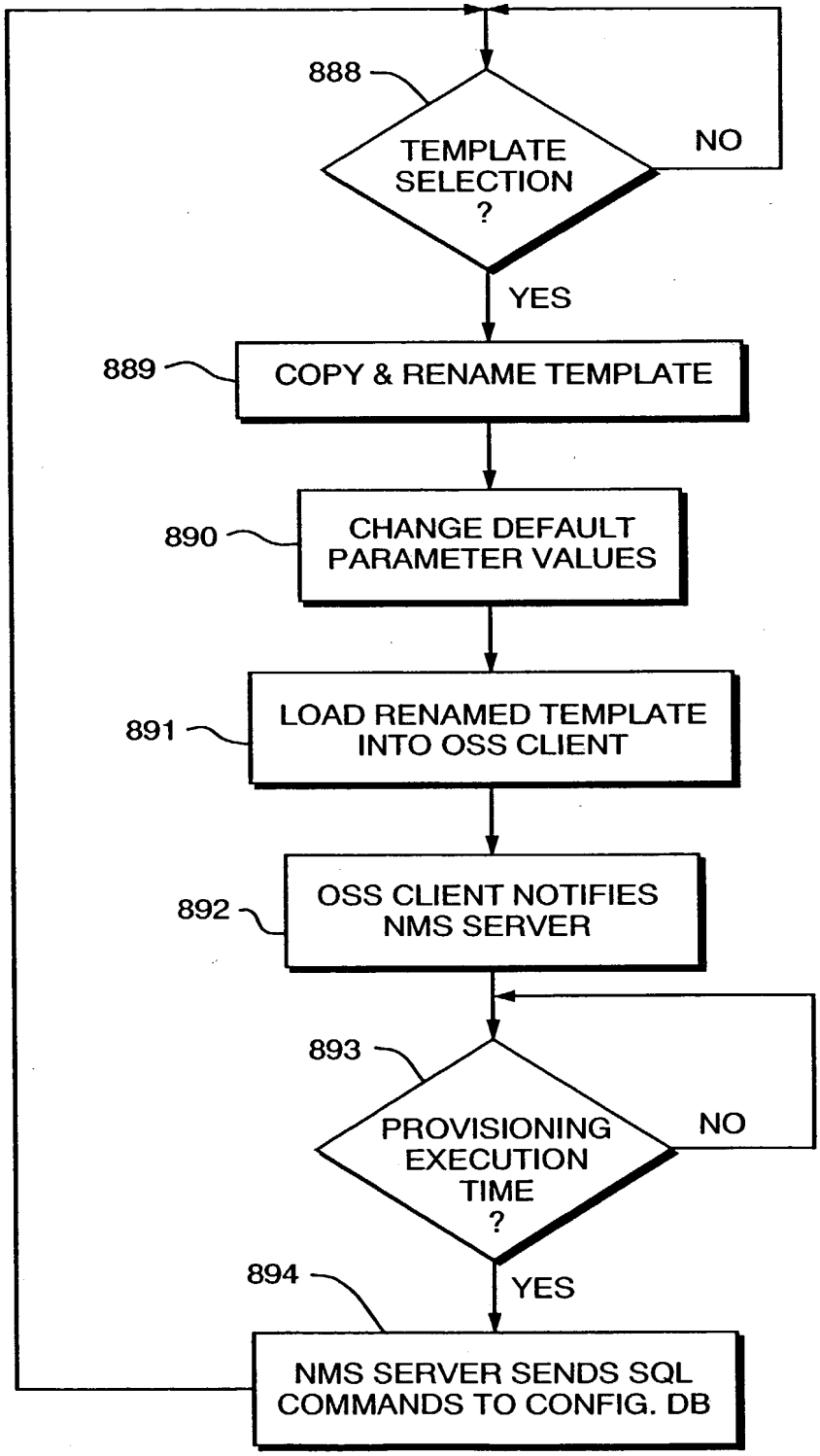
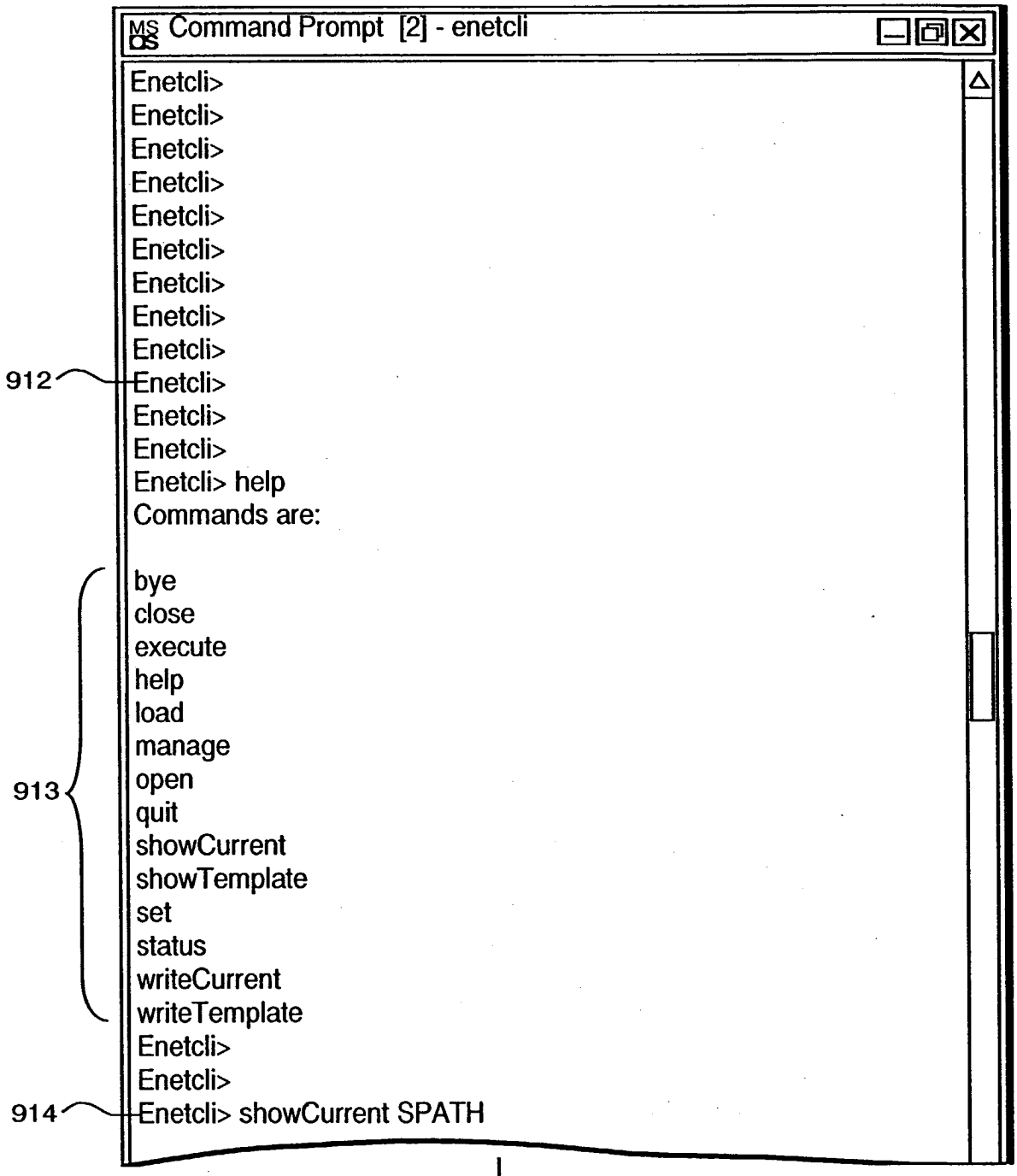

888
TEMPLATE SELECTION ?
NO
YES
889
COPY & RENAME TEMPLATE
890
CHANGE DEFAULT PARAMETER VALUES
891
LOAD RENAMED TEMPLATE INTO OSS CLIENT
892
OSS CLIENT NOTIFIES NMS SERVER
893
PROVISIONING EXECUTION TIME ?
NO
YES
894
NMS SERVER SENDS SQL COMMANDS TO CONFIG. DB

FIG. 3I



TO FIG. 3K

FIG. 3J

FROM FIG. 3J

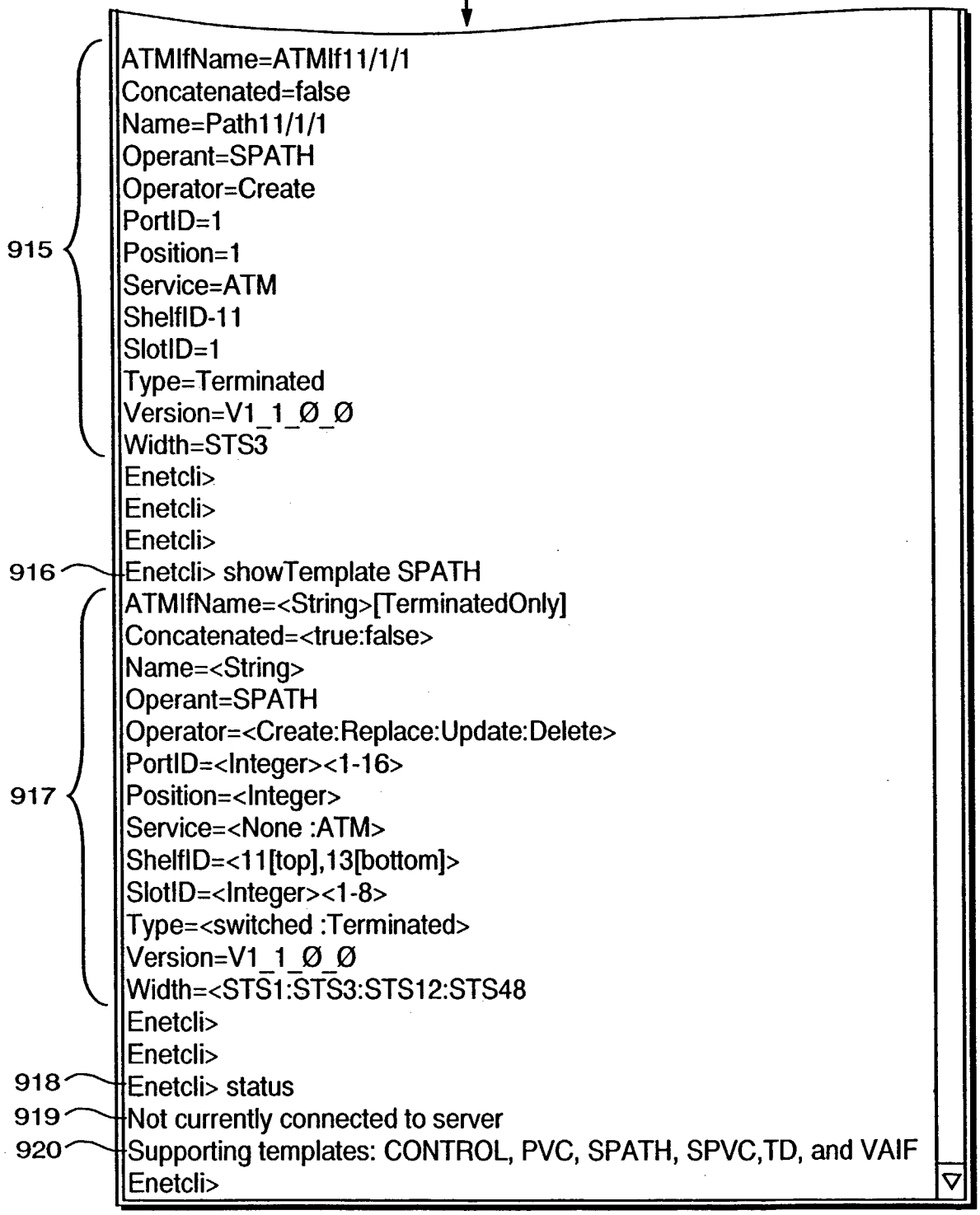


FIG. 3K

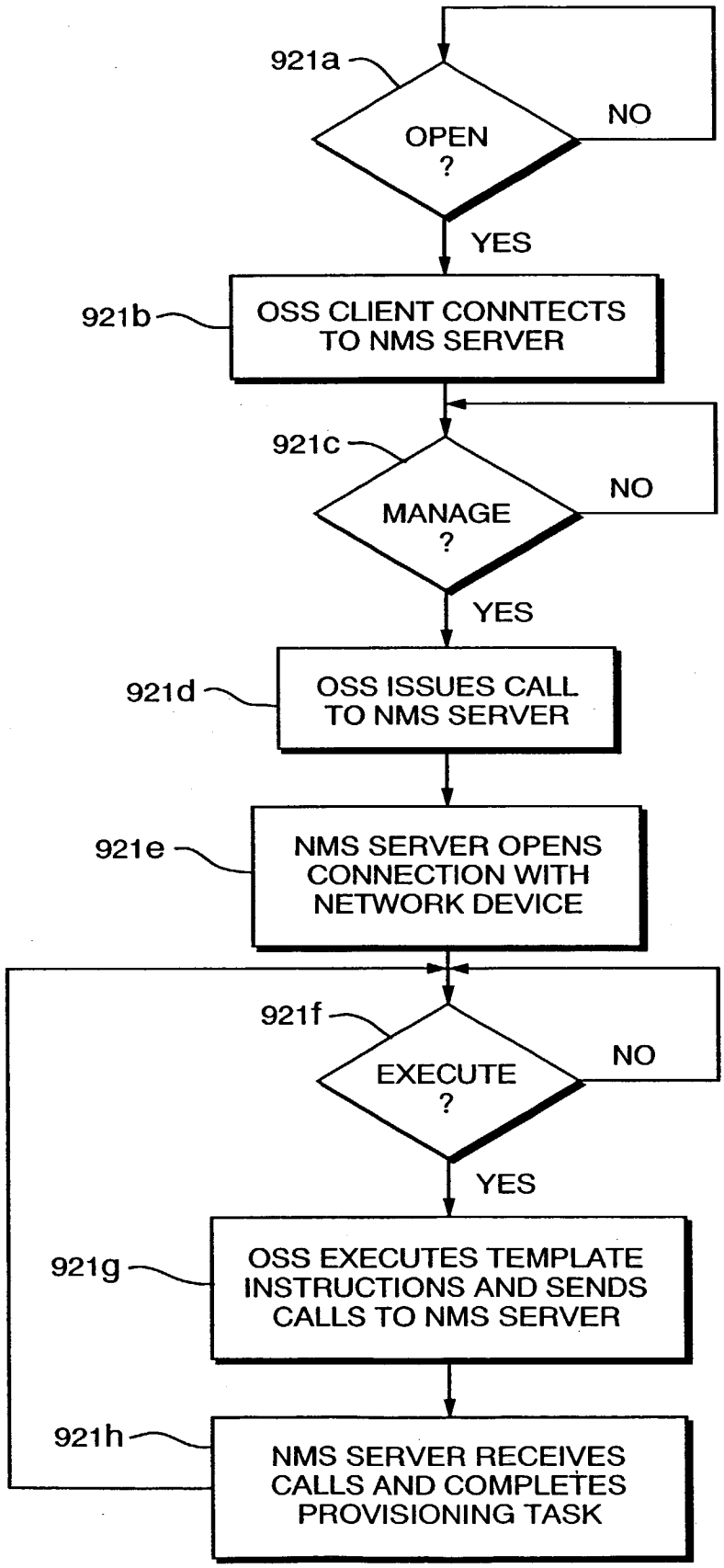

921a
OPEN ?
NO
YES
921b
OSS CLIENT CONNTECTS TO NMS SERVER
921c
MANAGE ?
NO
YES
921d
OSS ISSUES CALL TO NMS SERVER
921e
NMS SERVER OPENS CONNECTION WITH NETWORK DEVICE
921f
EXECUTE ?
NO
YES
921g
OSS EXECUTES TEMPLATE INSTRUCTIONS AND SENDS CALLS TO NMS SERVER
921h
NMS SERVER RECEIVES CALLS AND COMPLETES PROVISIONING TASK

FIG. 3L

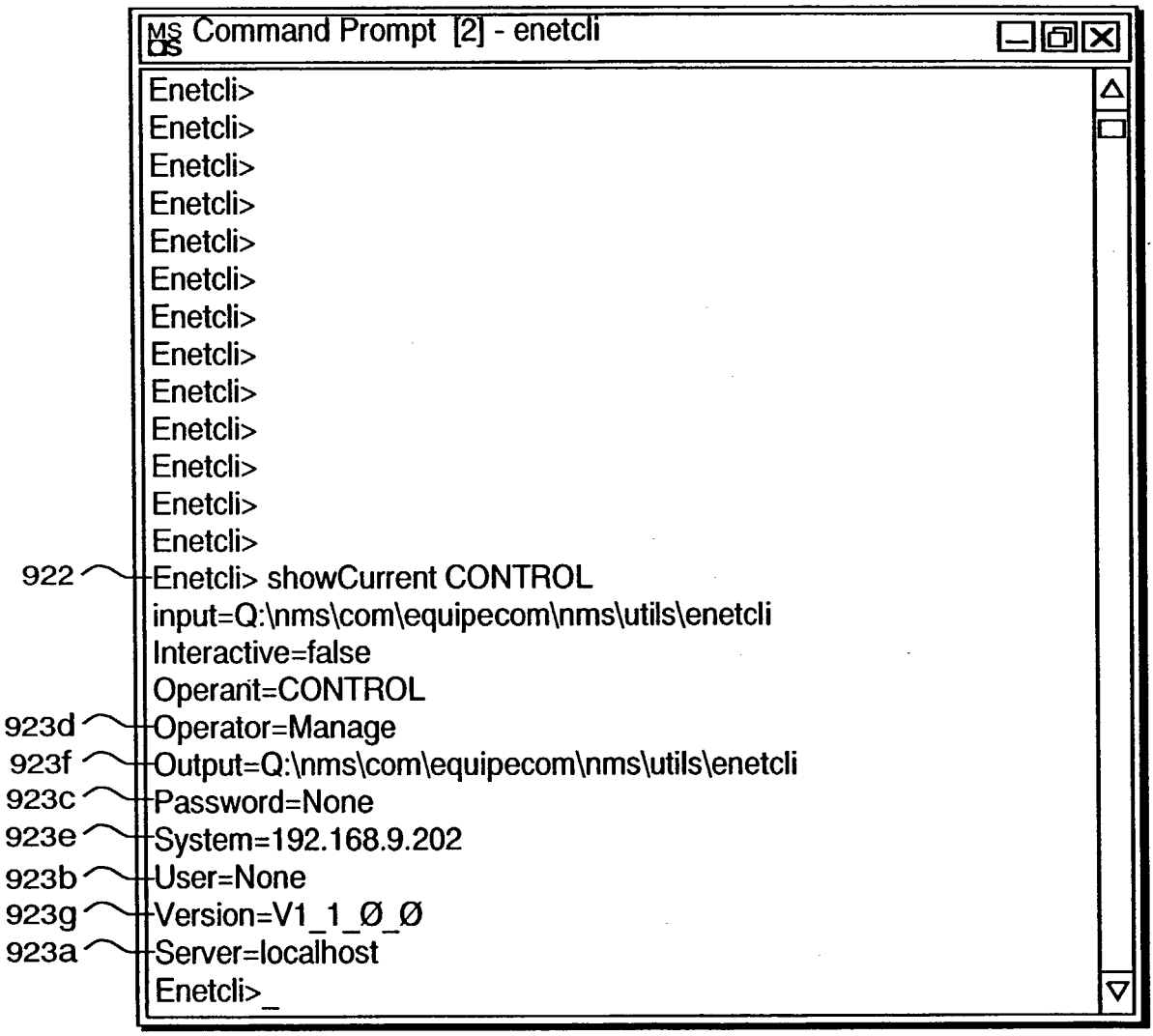
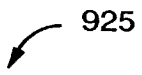

MS DOS Command Prompt [2] - enetcli
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
922
Enetcli> showCurrent CONTROL
input=Q:\nms\com\equipecom\nms\utils\enetcli
Interactive=false
Operant=CONTROL
923d
Operator=Manage
923f
Output=Q:\nms\com\equipecom\nms\utils\enetcli
923c
Password=None
923e
System=192.168.9.202
923b
User=None
923g
Version=V1_1_Ø_Ø
923a
Server=localhost
Enetcli>_

FIG. 3M

Operant=BATCH
Operator=Execute
Version=V1_1_0_0
924a ~ TASK1=execute-SPATH
924b ~ TASK2=execute-PVC
924c ~ TASK3=execute-SPVC
924d ~ TASK4=load-SPVC-spvc1
924e ~ TASK5=execute-SPVC
924f ~ TASK6=load-SPVC-spvc2
924e ~ TASK7=execute-SPVC
•
•
•
924g ~ TASK50=set-SPATH-PortID-3
924h ~ TASK51=execute-SPATH
924i ~ TASK52=set-SPATH-SlotID-2
924j ~ TASK53=execute-SPATH

FIG. 3N



Operant=BATCH
Operator=Execute
Version=V1_1_0_0
925a TASK1=execute-CONTROL
925b TASK2=execute-SPATH
925c TASK3=set-SPATH-PortID-3
925d TASK4=execute-SPATH
•
•
•
925e TASK61=set-CONTROL-System-192.168.9.201
925f TASK62=execute-CONTROL
925g TASK63=execute-SPATH
•
•
•
925h TASK108=close
925i TASK109=set-CONTROL-Server-Server1
925j TASK110=set-CONTROL-System-192.168.8.200
925k TASK111=execute-CONTROL
925l TASK112=execute-SPATH
•
•
•

FIG. 30

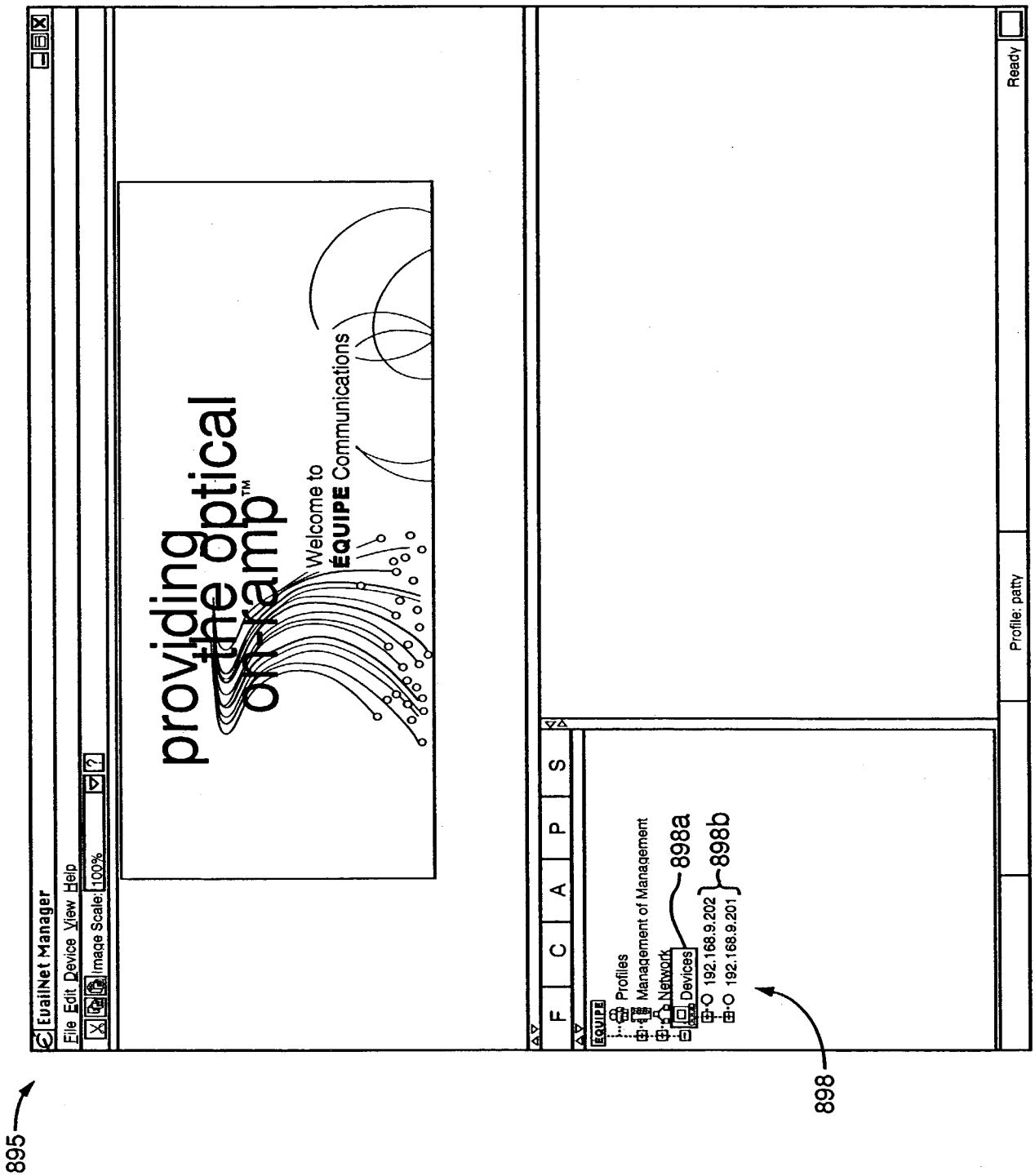

EvaliNet Manager
File Edit Device View Help
Image Scale: 100%
providing the optical advantage™
Welcome to ÉQUIPE Communications
F C A P S
ÉQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
898a
898b
898
Ready
Profile: patty
895

FIG. 4A

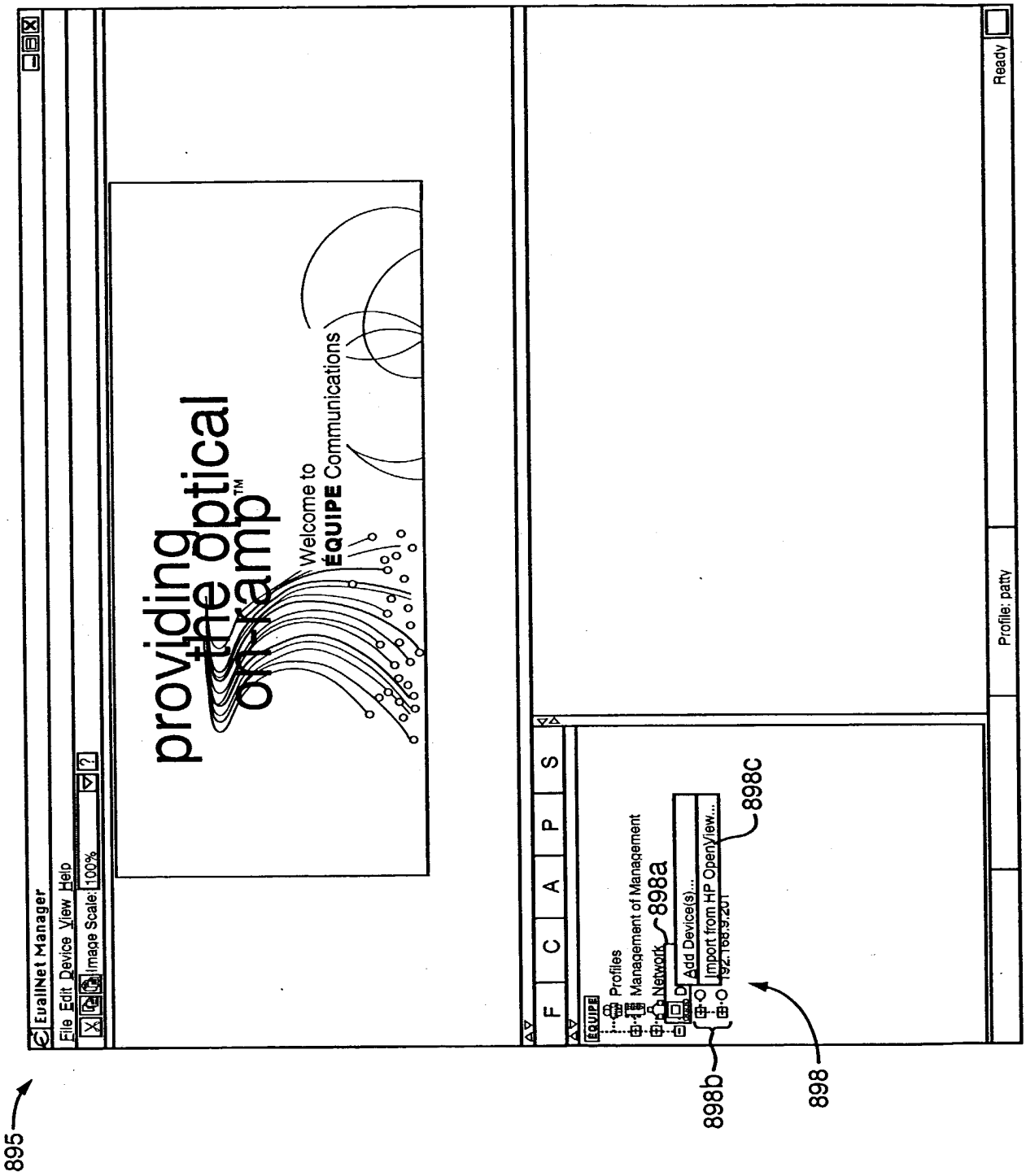

EvalINet Manager
File Edit Device View Help
Image Scale: 100%
providing the optical bandwidth™
Welcome to
ÉQUIPE Communications
F C A P S
EQUIPE
Profiles
Management of Management Network
Add Device(s)...
Import from HP OpenView...
192.168.9.201
Profile: patty
Ready
895
898
898a
898b
898c

FIG. 4B

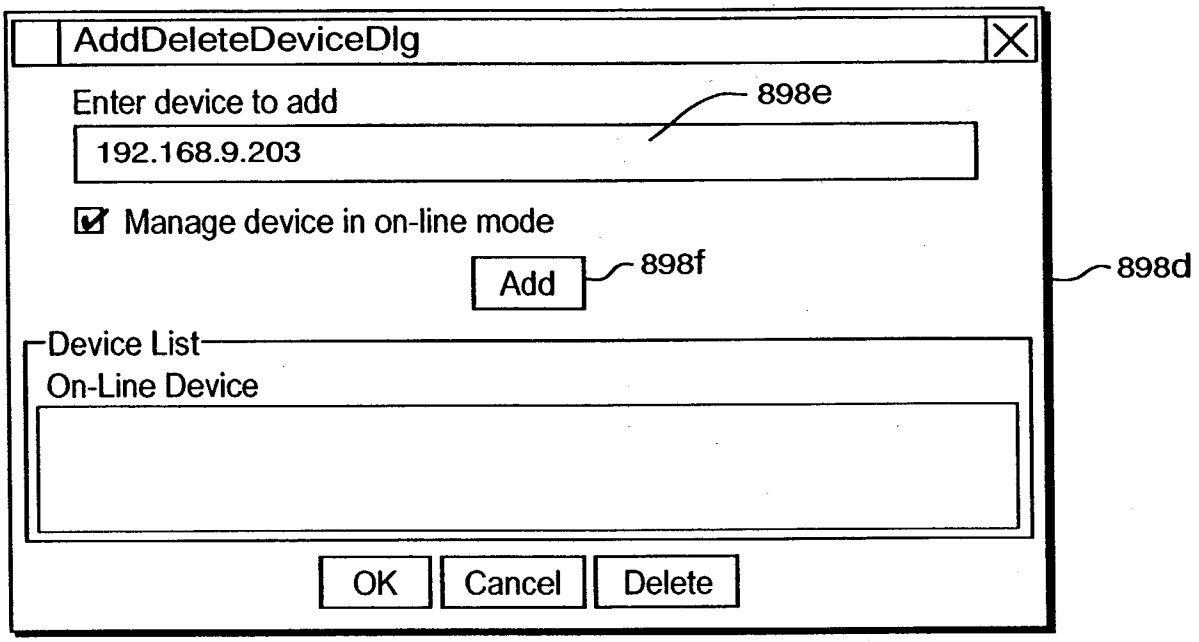

AddDeleteDeviceDlg
Enter device to add
898e
192.168.9.203
Manage device in on-line mode
Add
898f
898d
Device List
On-Line Device
OK
Cancel
Delete

FIG. 4C

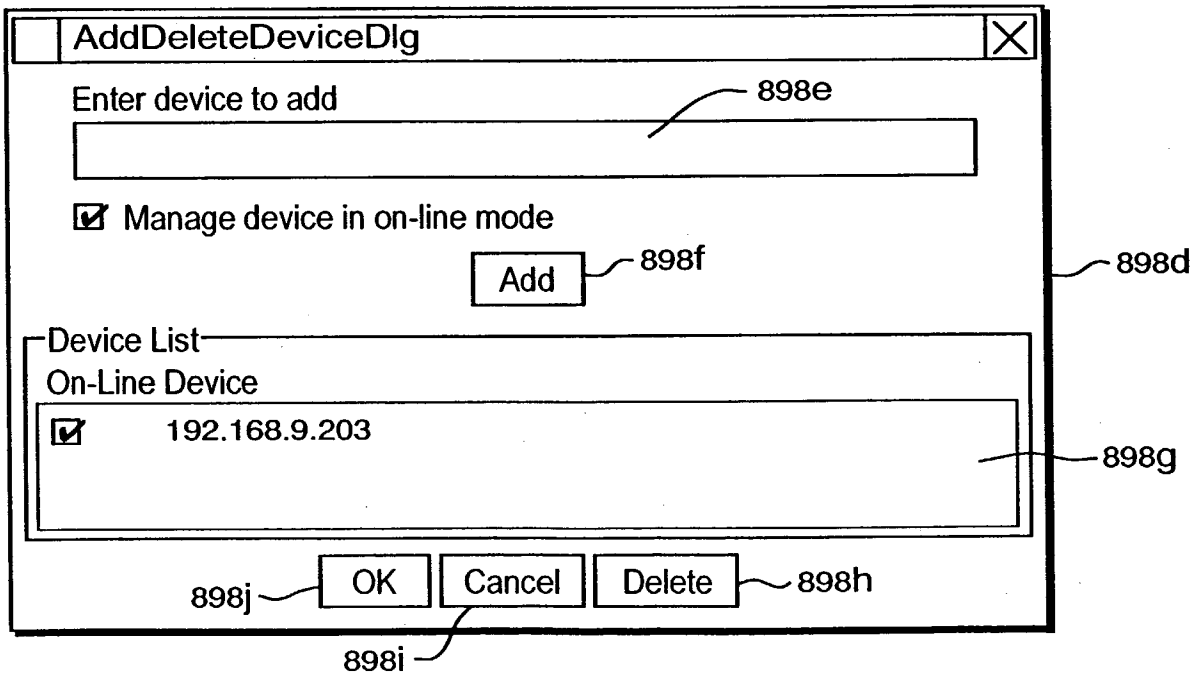

AddDeleteDeviceDlg
Enter device to add
898e
Manage device in on-line mode
Add
898f
898d
Device List
On-Line Device
192.168.9.203
898g
898j
OK
Cancel
Delete
898h
898i

FIG. 4D

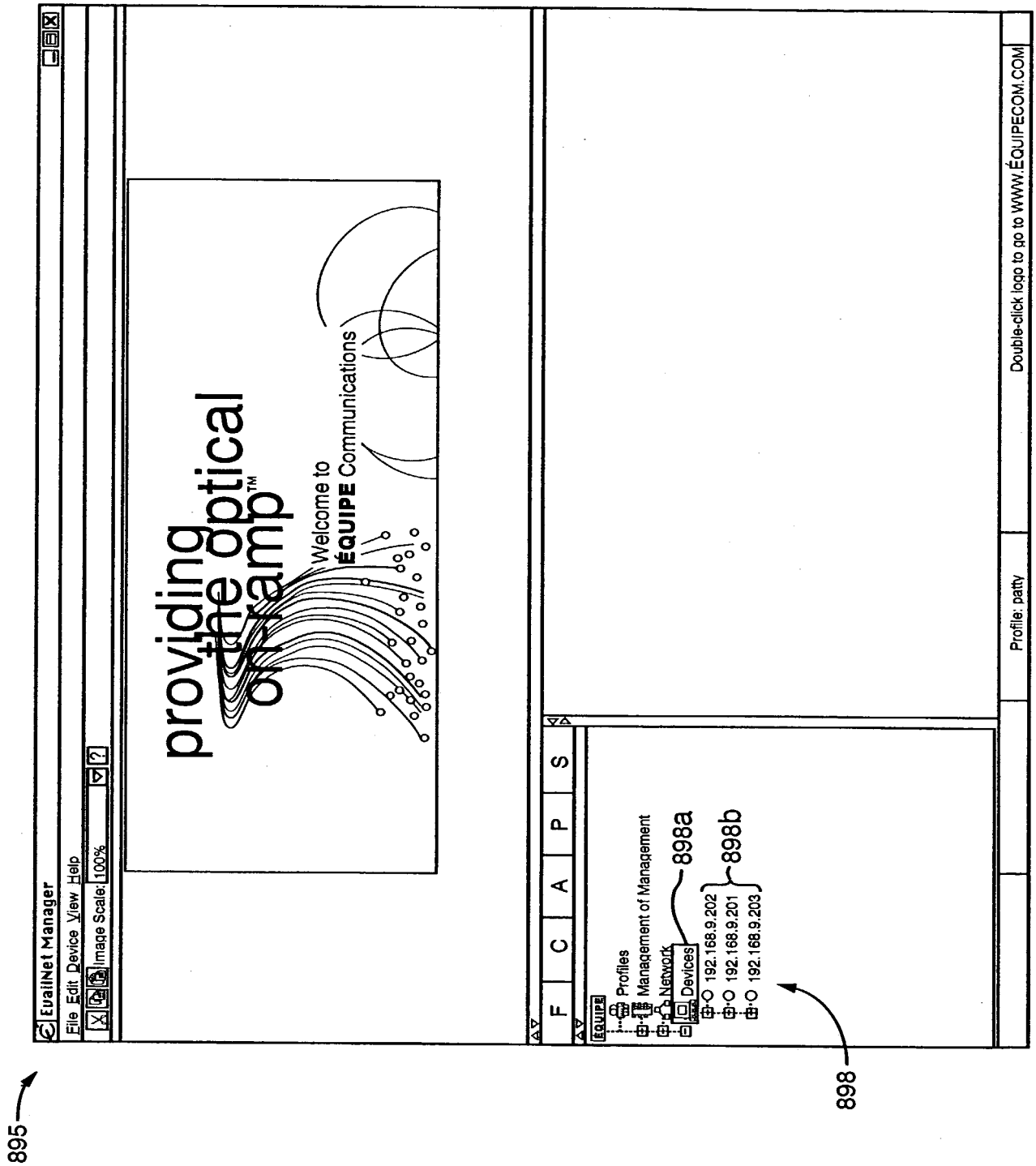

EvailNet Manager
File Edit Device View Help
Image Scale: 100%
providing the optical ramp™
Welcome to ÉQUIPE Communications
F C A P S
ÉQUIPE
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.201
192.168.9.203
898a
898b
898
895
Profile: patty
Double-click logo to go to WWW.ÉQUIPECOM.COM

FIG. 4E

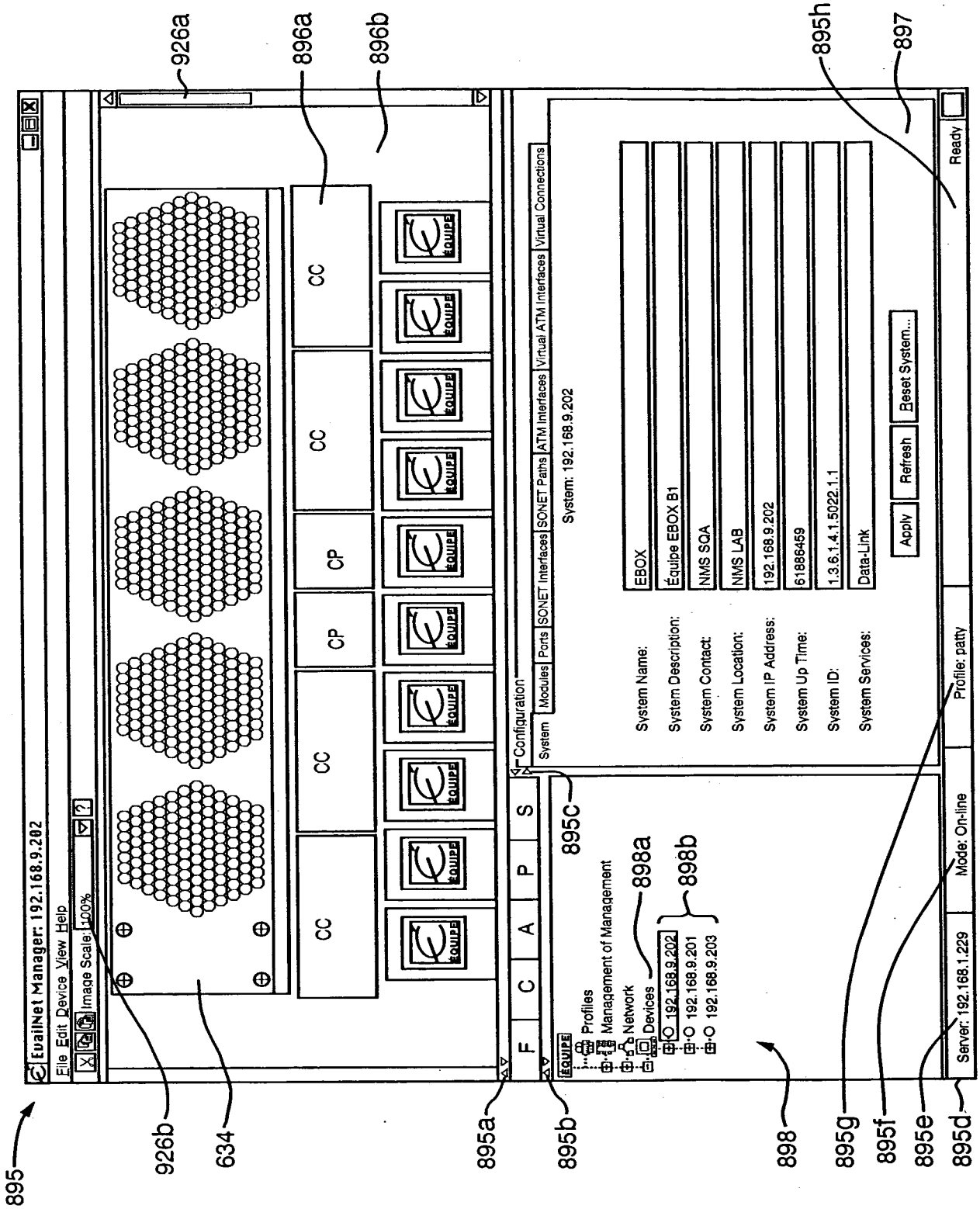

926a
896a
896b
895h
897
EvailNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
System Name:
EBOX
System Description:
Équipe EBOX B1
System Contact:
NMS SQA
System Location:
NMS LAB
System IP Address:
192.168.9.202
System Up Time:
61886459
System ID:
1.3.6.1.4.1.5022.1.1
System Services:
Data-Link
Apply
Refresh
Reset System...
Ready
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
192.168.9.203
898a
898b
895c
895a
895b
898
895g
895f
895e
895d
Mode: On-line
Profile: patty
Server: 192.168.1.229
926b
634
895

FIG. 4F

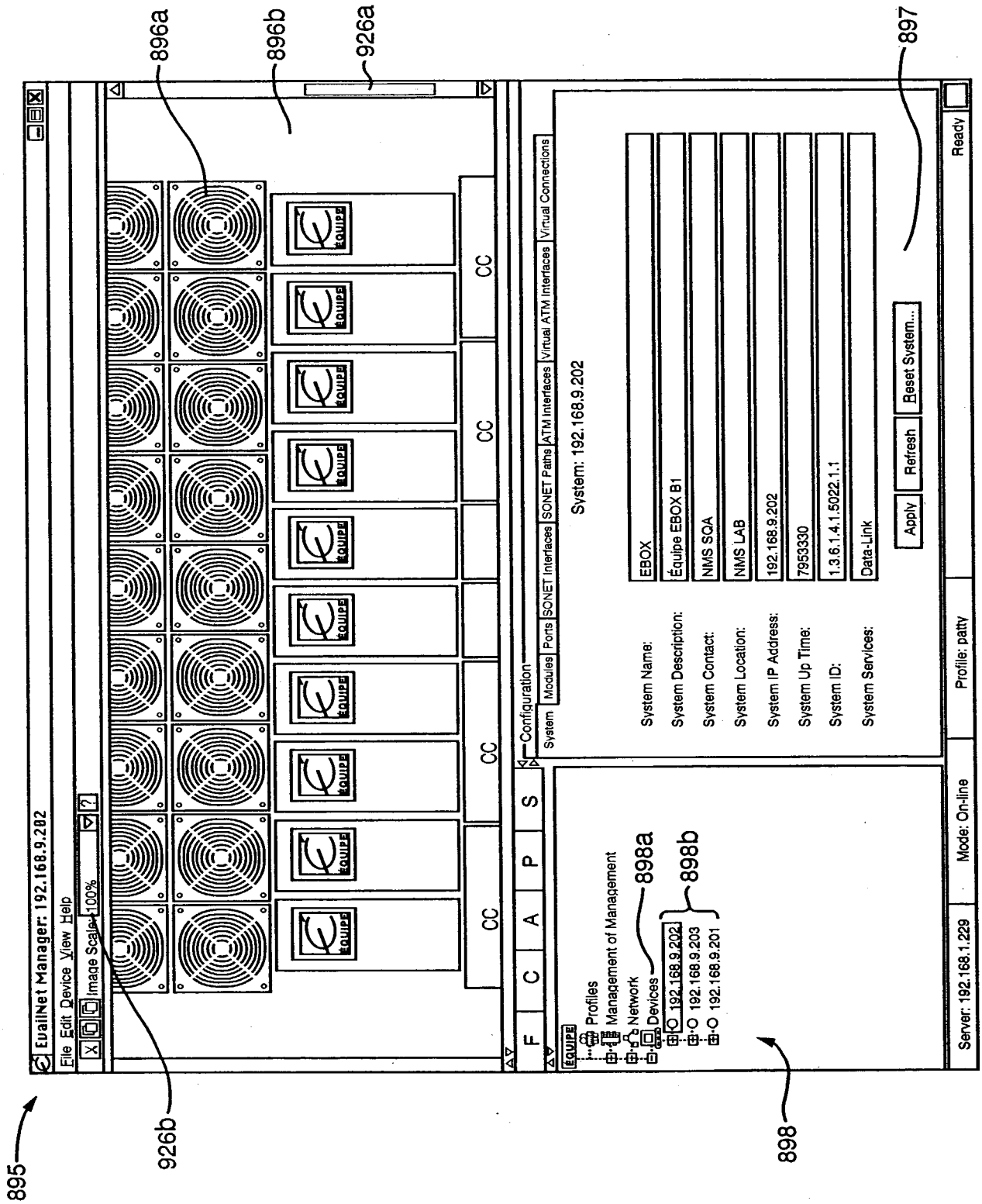

896a
896b
926a
897
895
926b
898
898a
898b
EquaiNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale 100%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4G

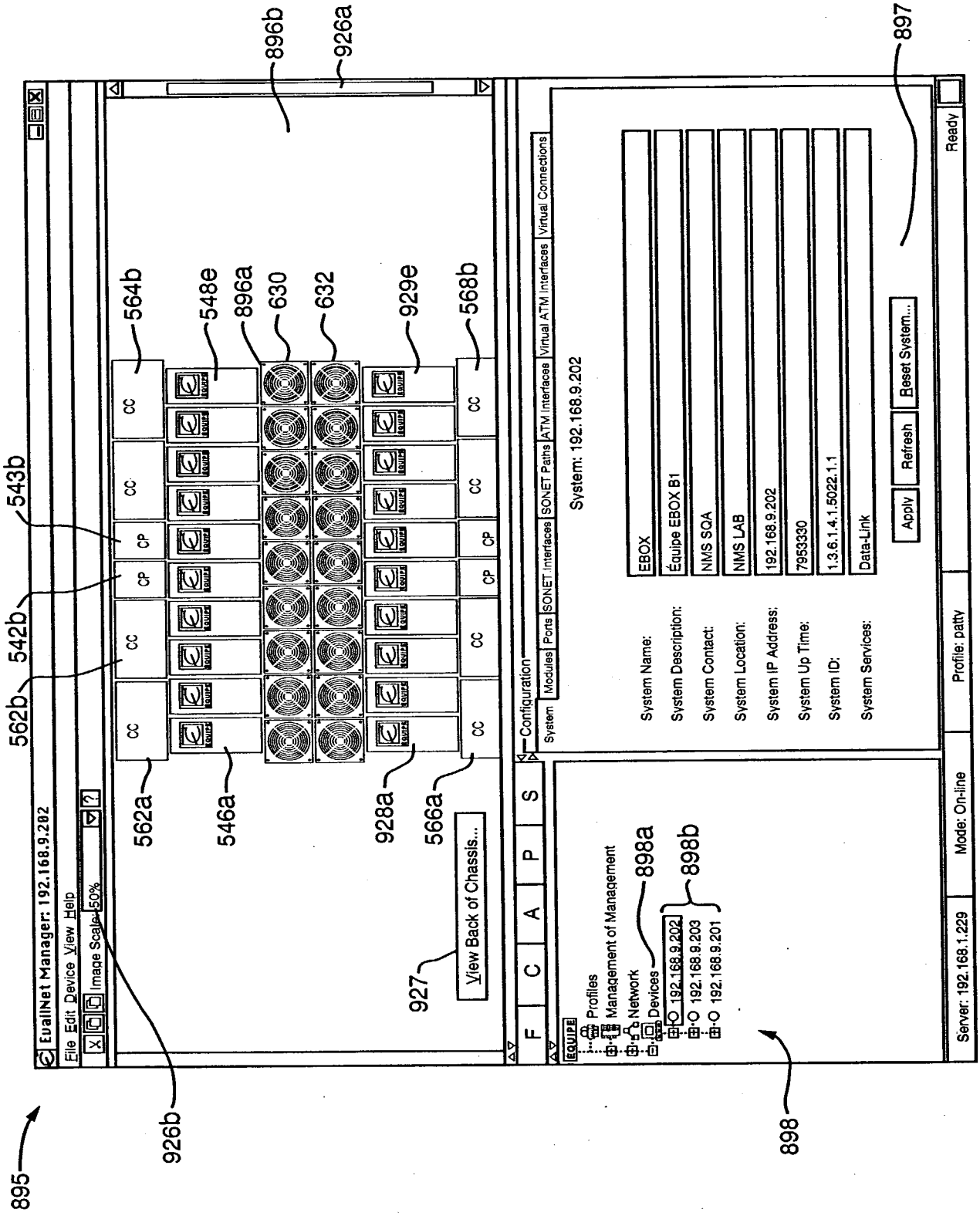

EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale 50%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
System Name:
EBOX
System Description:
Équipe EBOX B1
System Contact:
NMS SQA
System Location:
NMS LAB
System IP Address:
192.168.9.202
System Up Time:
7953330
System ID:
1.3.6.1.4.1.5022.1.1
System Services:
Data-Link
Apply
Refresh
Reset System...
Ready
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
View Back of Chassis...
Server: 192.168.1.229
Mode: On-line
Profile: patty
895
926b
562b
542b
543b
562a
546a
928a
566a
927
564b
548e
896a
630
632
929e
568b
896b
926a
897
898
898a
898b

FIG. 4H

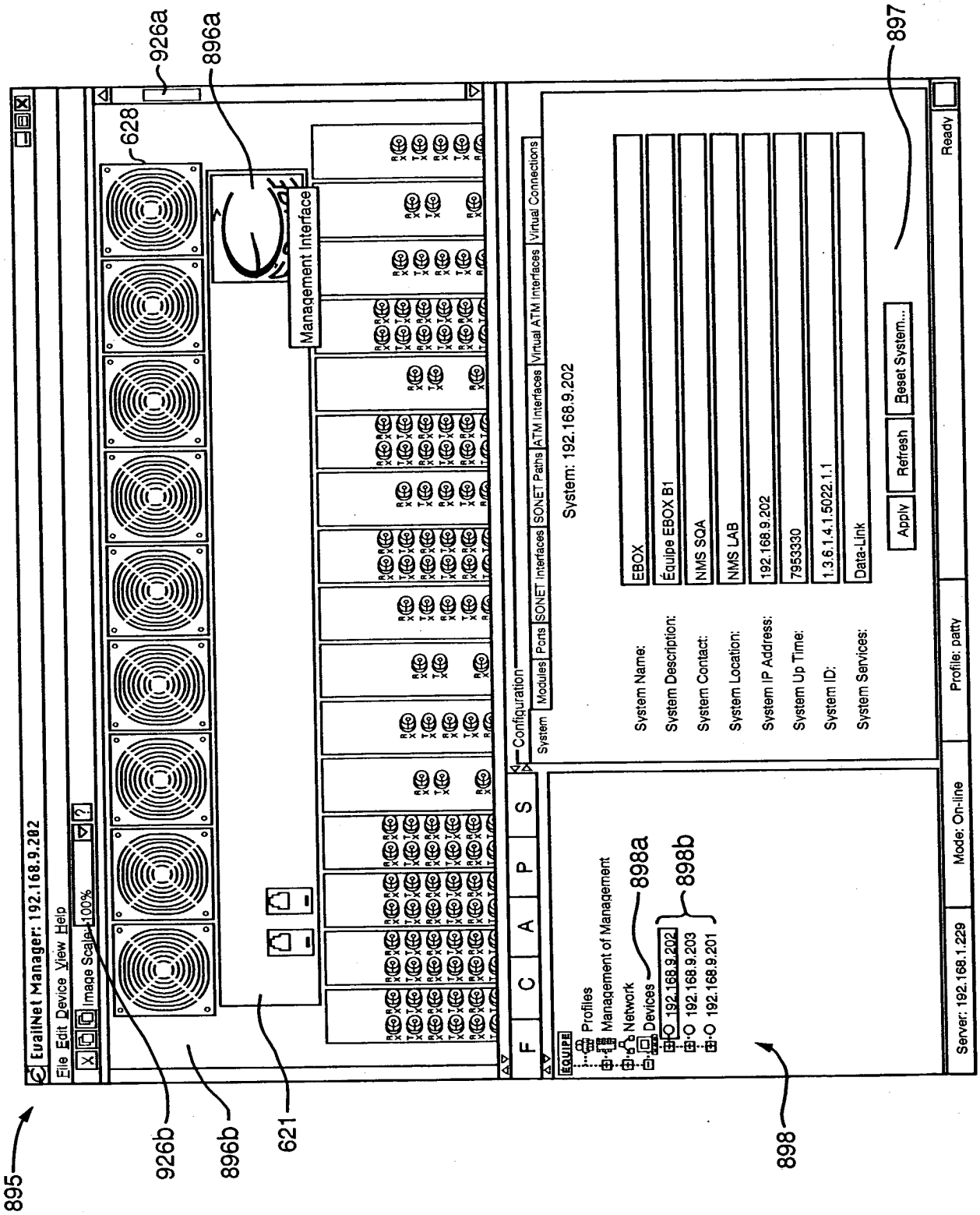

926a
896a
628
895
926b
896b
621
898
897
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale 100%
Management Interface
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
898a
898b
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4I

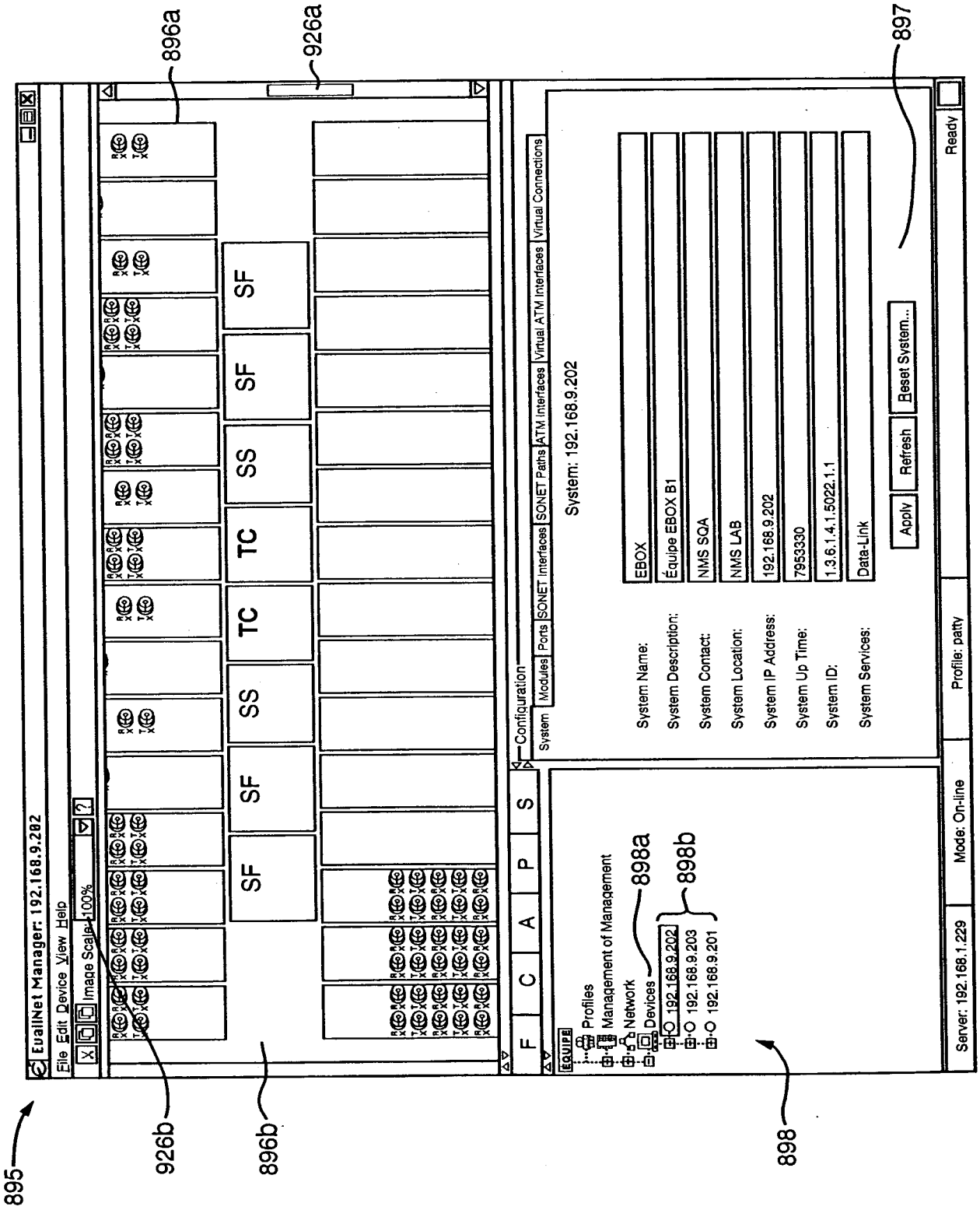

EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
System Name:
EBOX
System Description:
Équipe EBOX B1
System Contact:
NMS SQA
System Location:
NMS LAB
System IP Address:
192.168.9.202
System Up Time:
7953330
System ID:
1.3.6.1.4.1.5022.1.1
System Services:
Data-Link
Apply
Refresh
Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
F C A P S
SF SF SS TC TC SS SF SF
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready
895
926b
896b
898
896a
926a
897
898a
898b

FIG. 4J

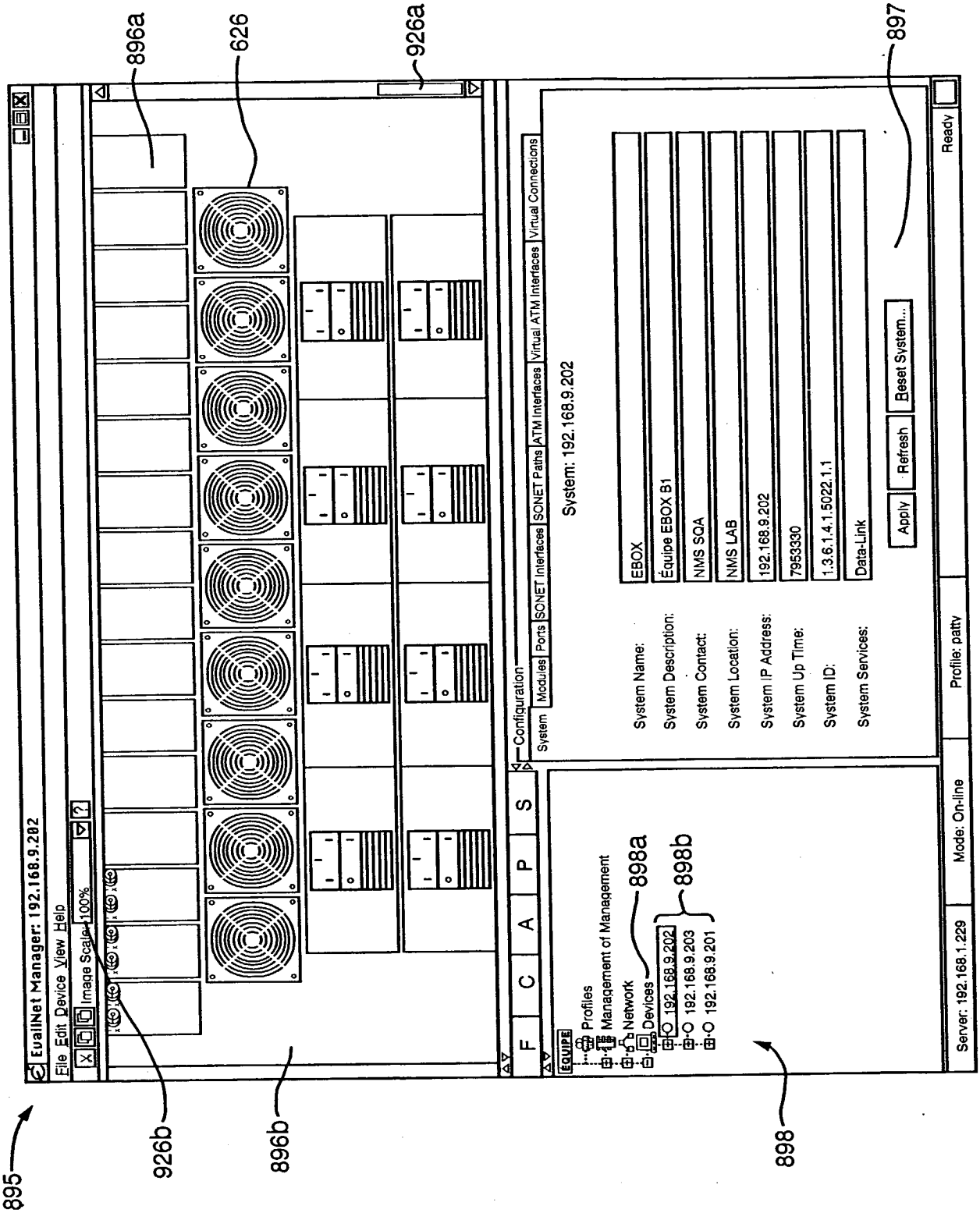

EqualNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
System Name:
EBOX
System Description:
Équipe EBOX B1
System Contact:
NMS SQA
System Location:
NMS LAB
System IP Address:
192.168.9.202
System Up Time:
7953330
System ID:
1.3.6.1.4.1.5022.1.1
System Services:
Data-Link
Apply
Refresh
Reset System...
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Ready
Server: 192.168.1.229
Mode: On-line
Profile: patty
895
896a
896b
897
898
898a
898b
926a
926b
626

FIG. 4K

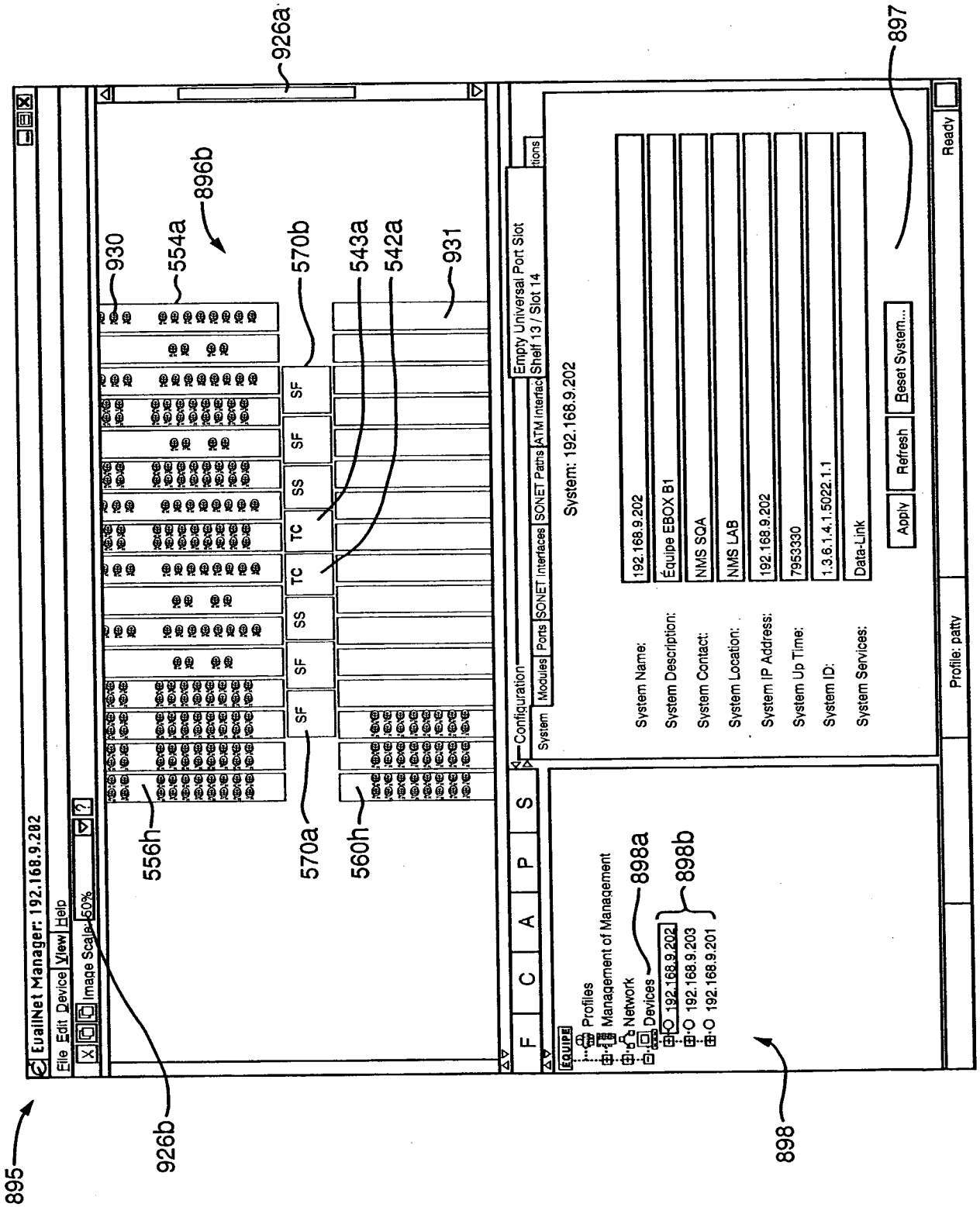

926a
896b
930
554a
570b
543a
542a
931
897
895
926b
556h
570a
560h
898a
898b
898
EualiNet Manager: 192.168.9.282
File Edit Device View Help
Image Scale 50%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfac
Empty Universal Port Slot
Shelf 13 / Slot 14
System: 192.168.9.202
System Name: 192.168.9.202
System Description: Equipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Ready
Profile: patty
SF
TC
SS

FIG. 4L

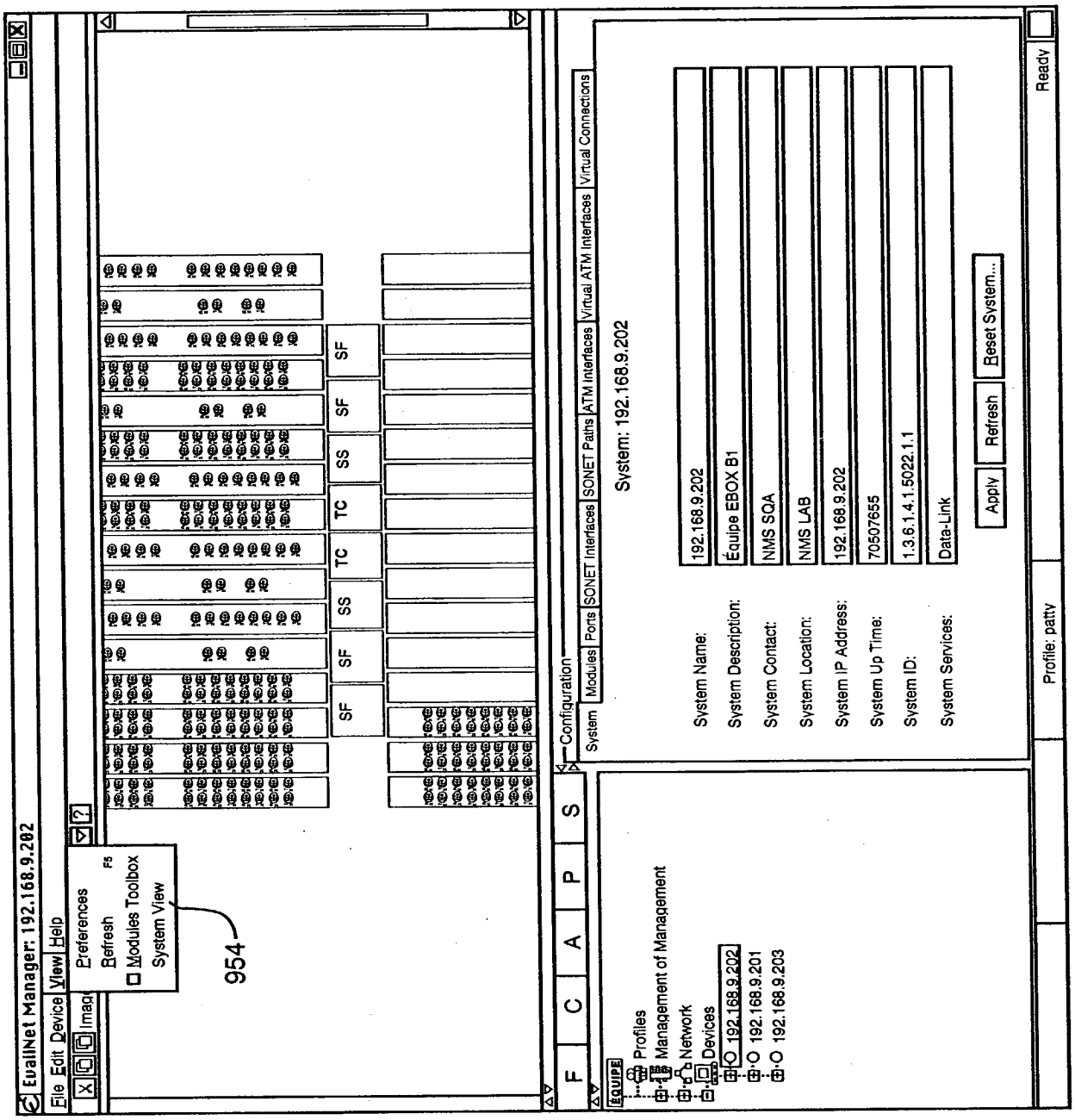

EvalNet Manager: 192.168.9.202
File Edit Device View Help
Preferences
Refresh F5
Modules Toolbox
System View
954
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
192.168.9.203
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: 192.168.9.202
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 70507655
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Profile: patty
Ready

FIG. 4M

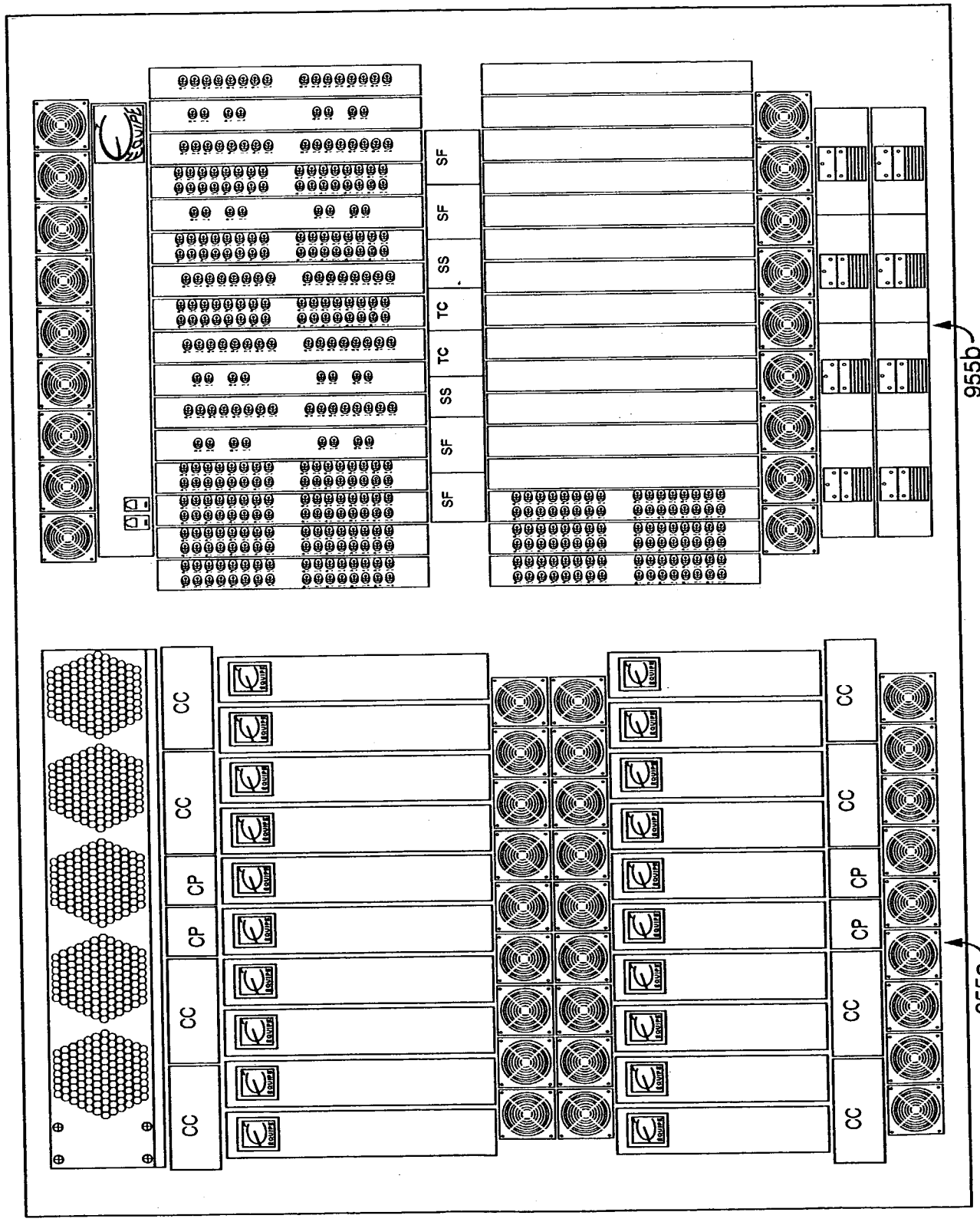

SF
SF
SS
TC
TC
SS
SF
SF
955b
CC
CC
CP
CP
CC
CC
CC
CP
CP
CC
CC
CC
955a
955

FIG. 4N

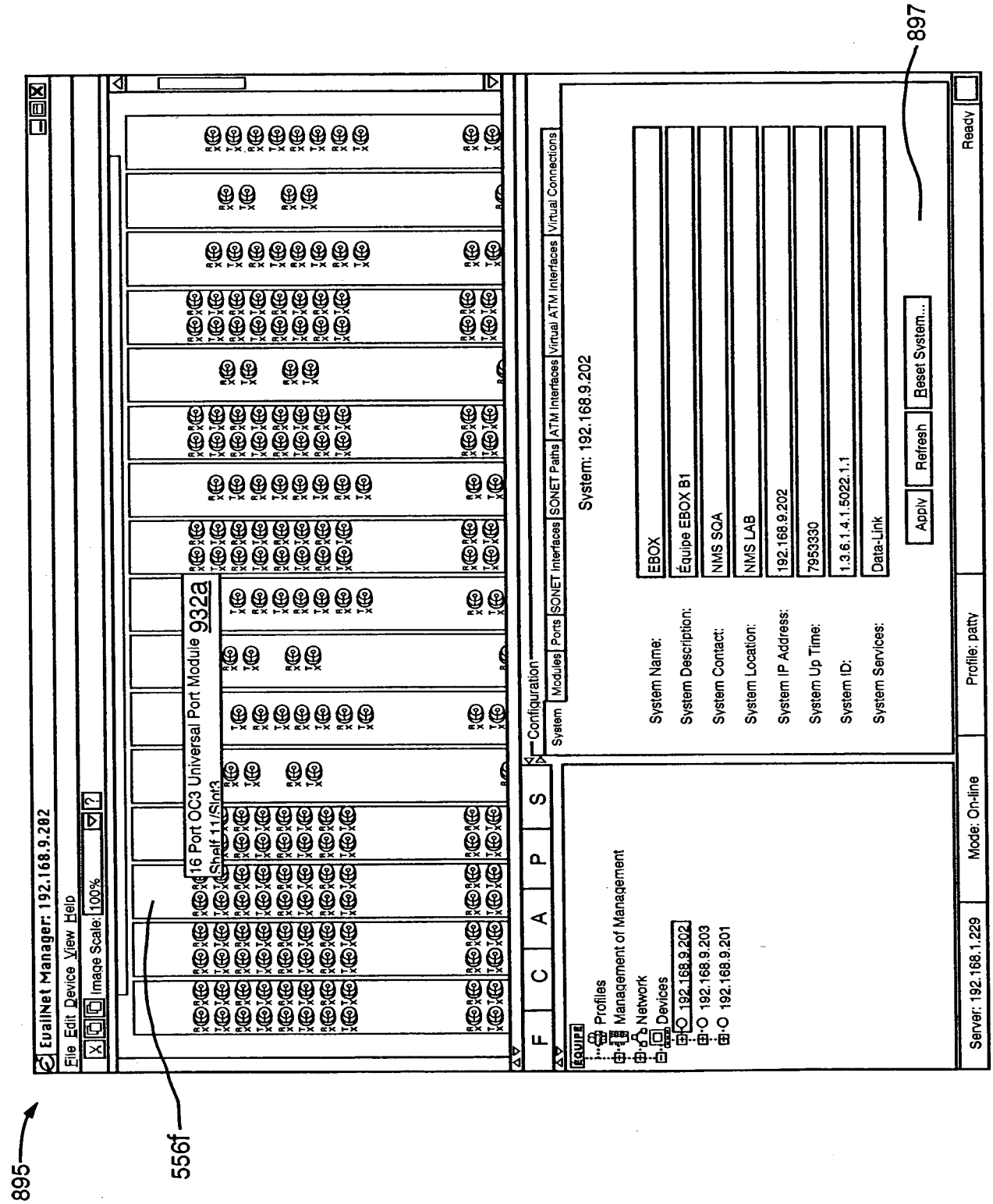

895
556f
897
932a
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
16 Port OC3 Universal Port Module
Shelf 11/Slot3
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 40

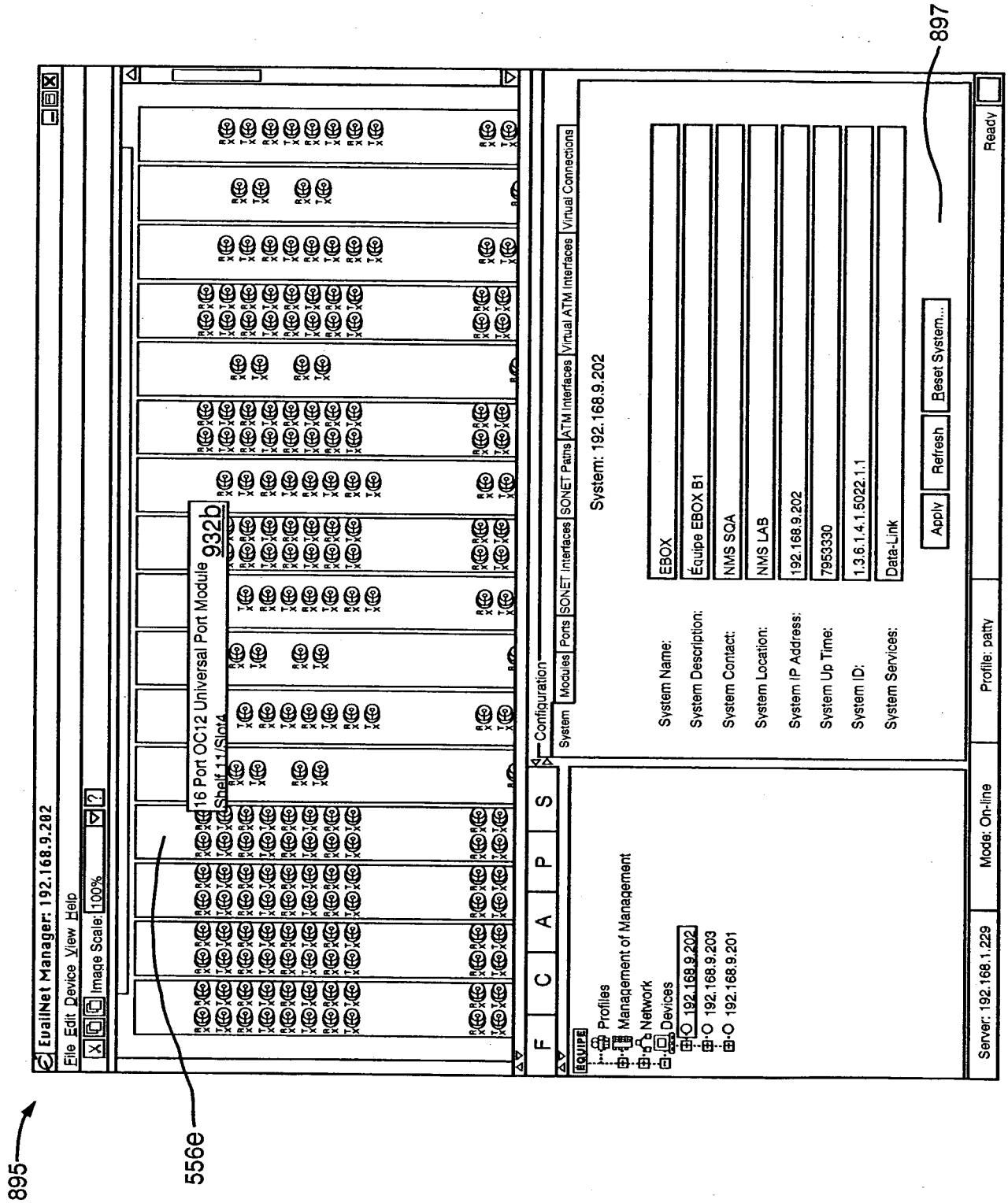

895
556e
932b
897
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
16 Port OC12 Universal Port Module
Shelf 11/Slot4
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Equipe EBOX B1
NMS SOA
NMS LAB
192.168.9.202
7953330
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
F C A P S
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4P

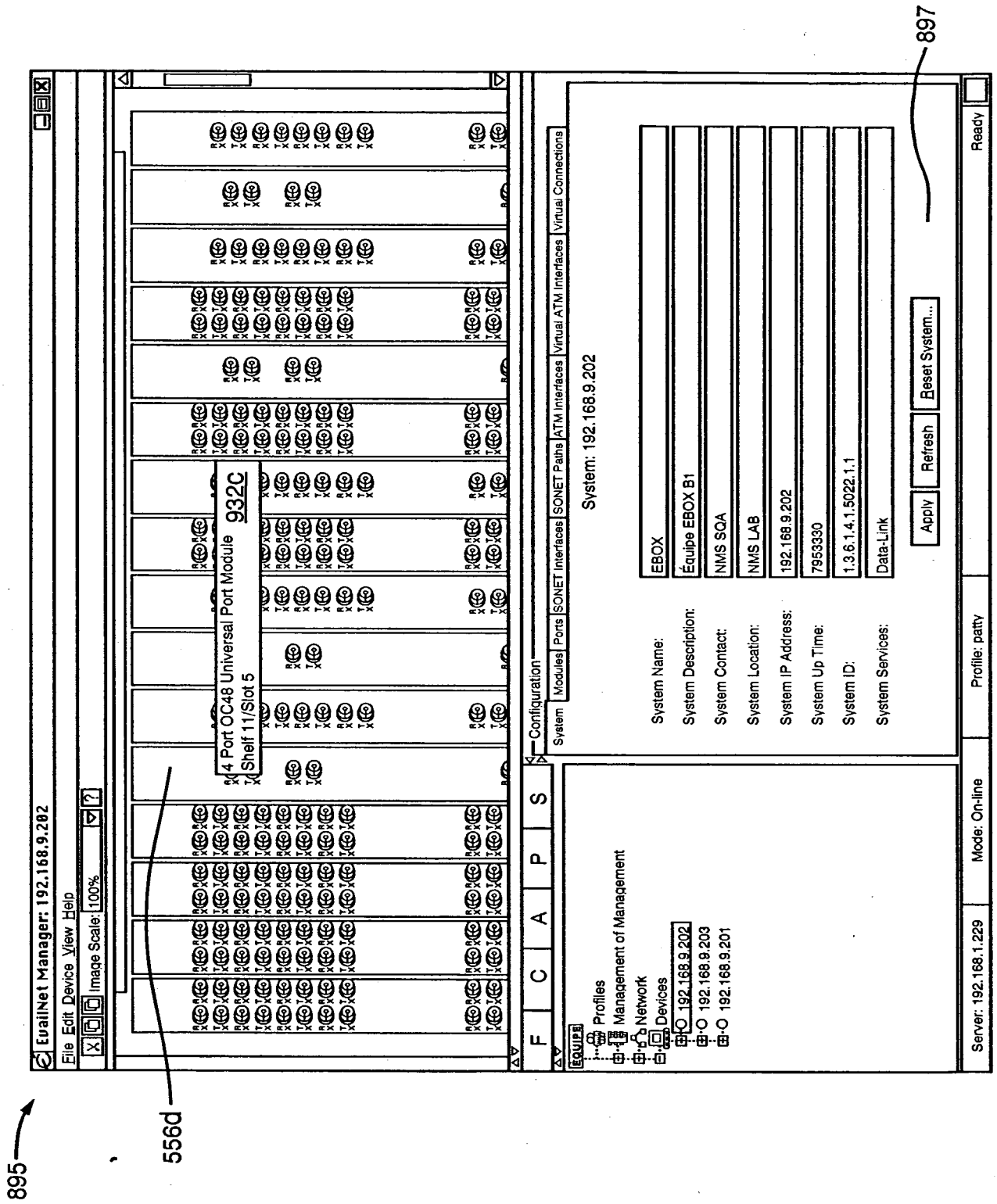

895
556d
897
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
4 Port OC48 Universal Port Module 932C
Shelf 11/Slot 5
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4Q

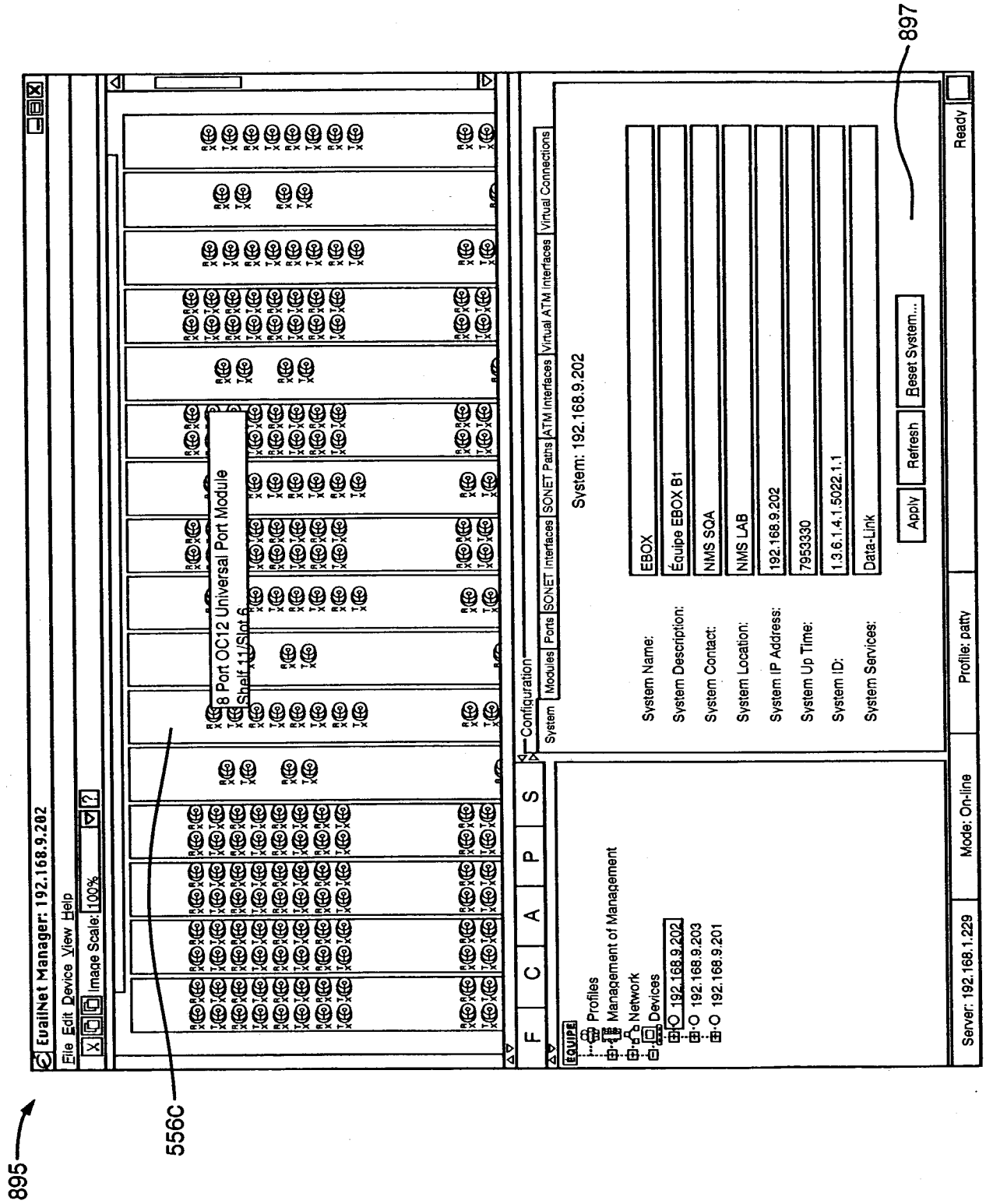

895
556C
897
EvailNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
8 Port OC12 Universal Port Module
Shelf 11/Slot 6
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.202
7953330
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4R

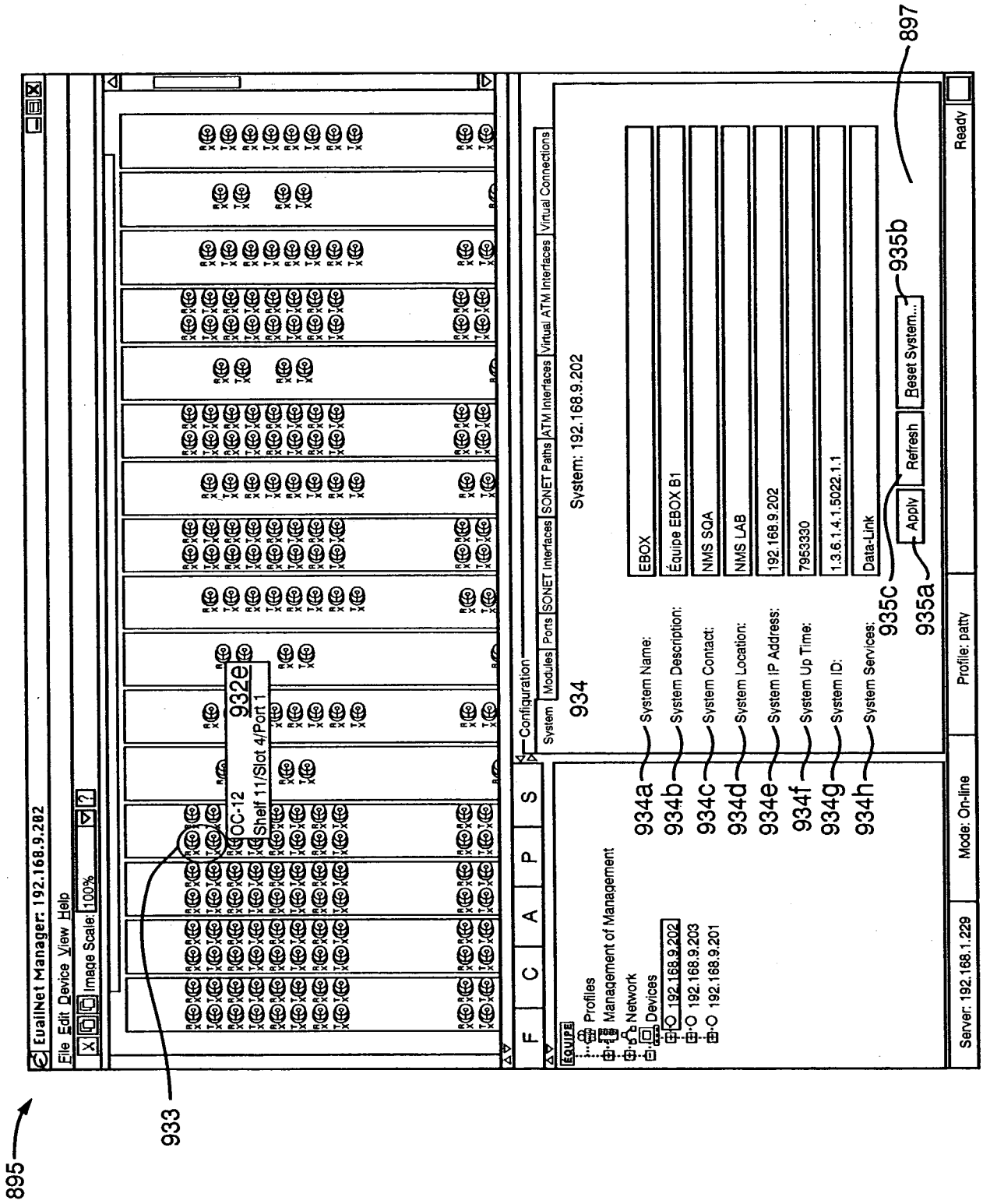

895
933
932e
OC-12
Shelf 11/Slot 4/Port 1
EvailNet Manager: 192.168.9.282
File Edit Device View Help
Image Scale: 100%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
934
934a System Name:
934b System Description:
934c System Contact:
934d System Location:
934e System IP Address:
934f System Up Time:
934g System ID:
934h System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.202
7953330
1.3.6.1.4.1.5022.1.1
Data-Link
935c
935a
Apply
Refresh
Reset System...
935b
897
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4S

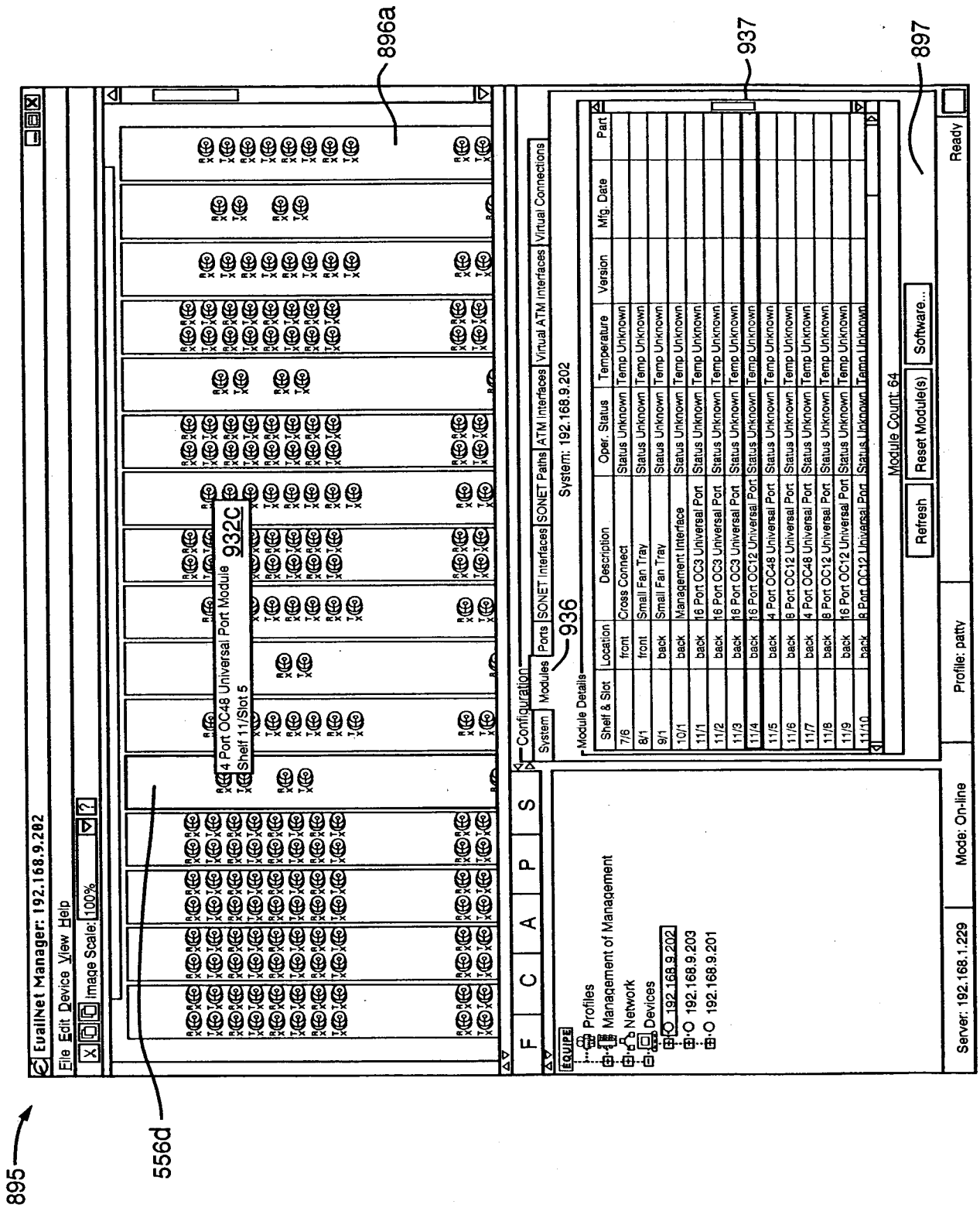

895
556d
896a
937
897
932C
936
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
4 Port OC48 Universal Port Module
Shelf 11/Slot 5
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM interfaces
Virtual ATM interfaces
Virtual Connections
System: 192.168.9.202
Module Details
Module Count: 64
Refresh
Reset Module(s)
Software...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4T

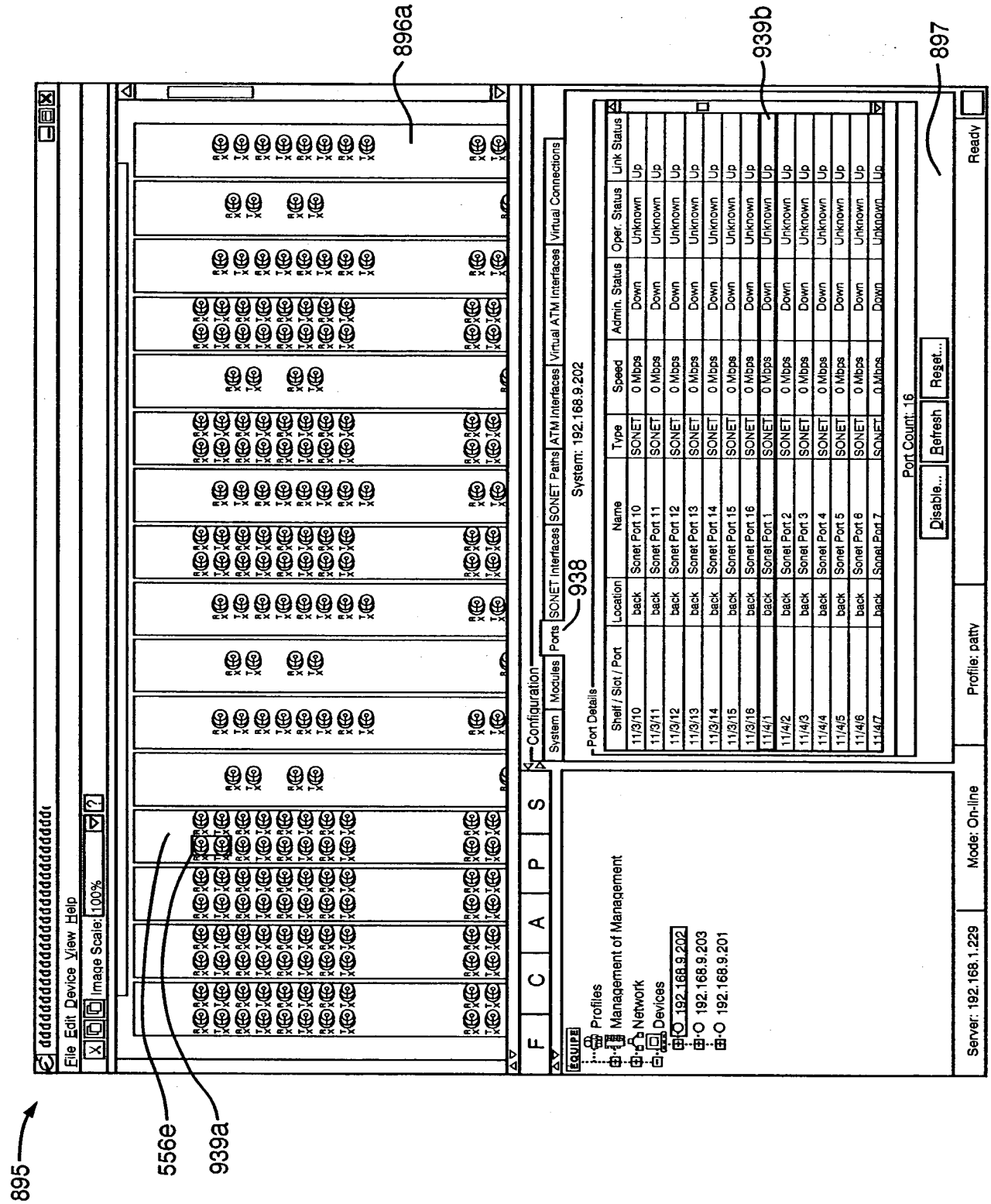

895
556e
939a
896a
939b
897
938
File Edit Device View Help
Image Scale: 100%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
Port Details
Shelf / Slot / Port
Location
Name
Type
Speed
Admin. Status
Oper. Status
Link Status
11/3/10 back Sonet Port 10 SONET 0 Mbps Down Unknown Up
11/3/11 back Sonet Port 11 SONET 0 Mbps Down Unknown Up
11/3/12 back Sonet Port 12 SONET 0 Mbps Down Unknown Up
11/3/13 back Sonet Port 13 SONET 0 Mbps Down Unknown Up
11/3/14 back Sonet Port 14 SONET 0 Mbps Down Unknown Up
11/3/15 back Sonet Port 15 SONET 0 Mbps Down Unknown Up
11/3/16 back Sonet Port 16 SONET 0 Mbps Down Unknown Up
11/4/1 back Sonet Port 1 SONET 0 Mbps Down Unknown Up
11/4/2 back Sonet Port 2 SONET 0 Mbps Down Unknown Up
11/4/3 back Sonet Port 3 SONET 0 Mbps Down Unknown Up
11/4/4 back Sonet Port 4 SONET 0 Mbps Down Unknown Up
11/4/5 back Sonet Port 5 SONET 0 Mbps Down Unknown Up
11/4/6 back Sonet Port 6 SONET 0 Mbps Down Unknown Up
11/4/7 back Sonet Port 7 SONET 0 Mbps Down Unknown Up
Port Count: 16
Disable...
Refresh
Reset...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4U

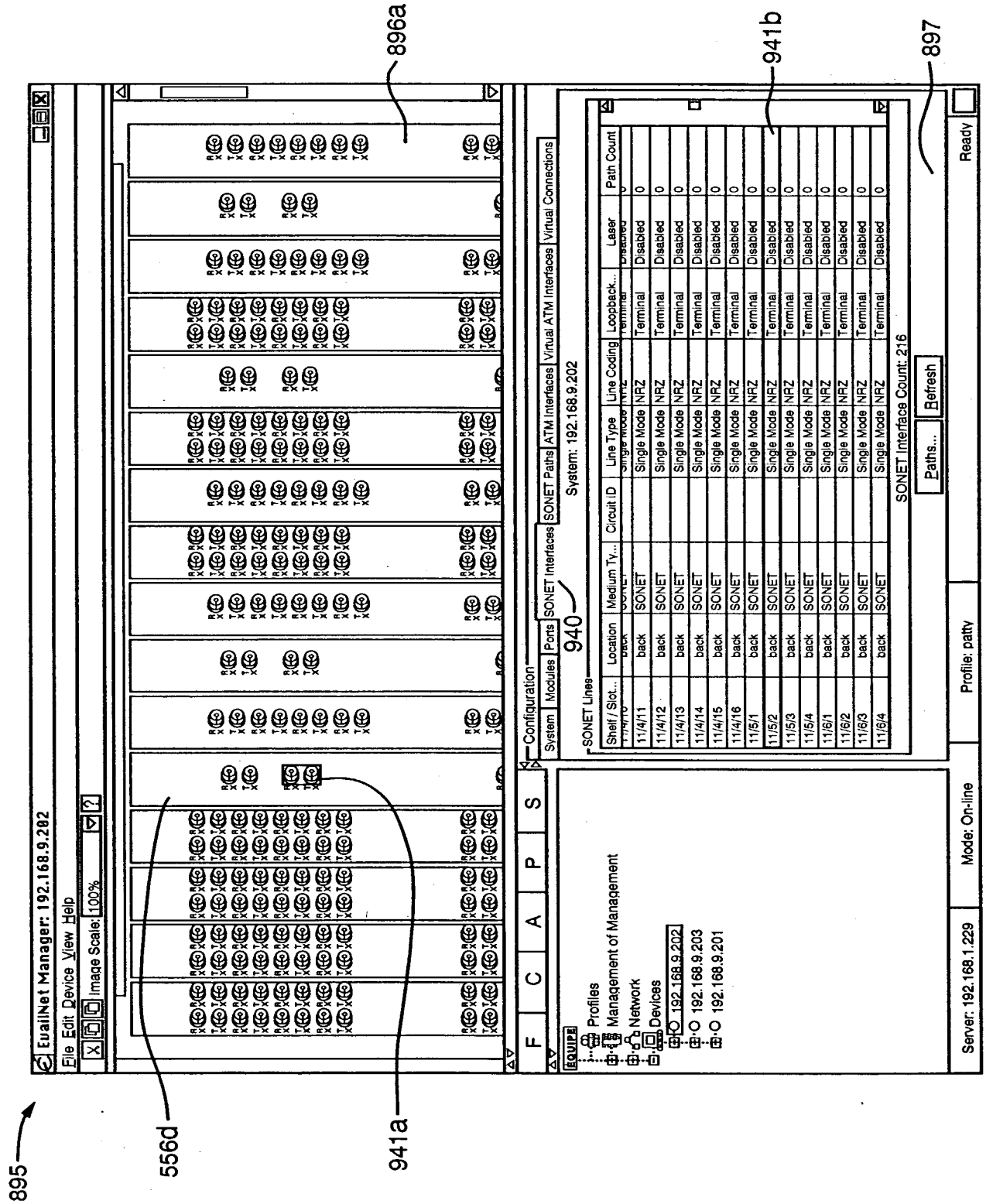

895
556d
941a
896a
941b
897
940
EvailNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
SONET Lines
SONET Interface Count: 216
Paths...
Refresh
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4V

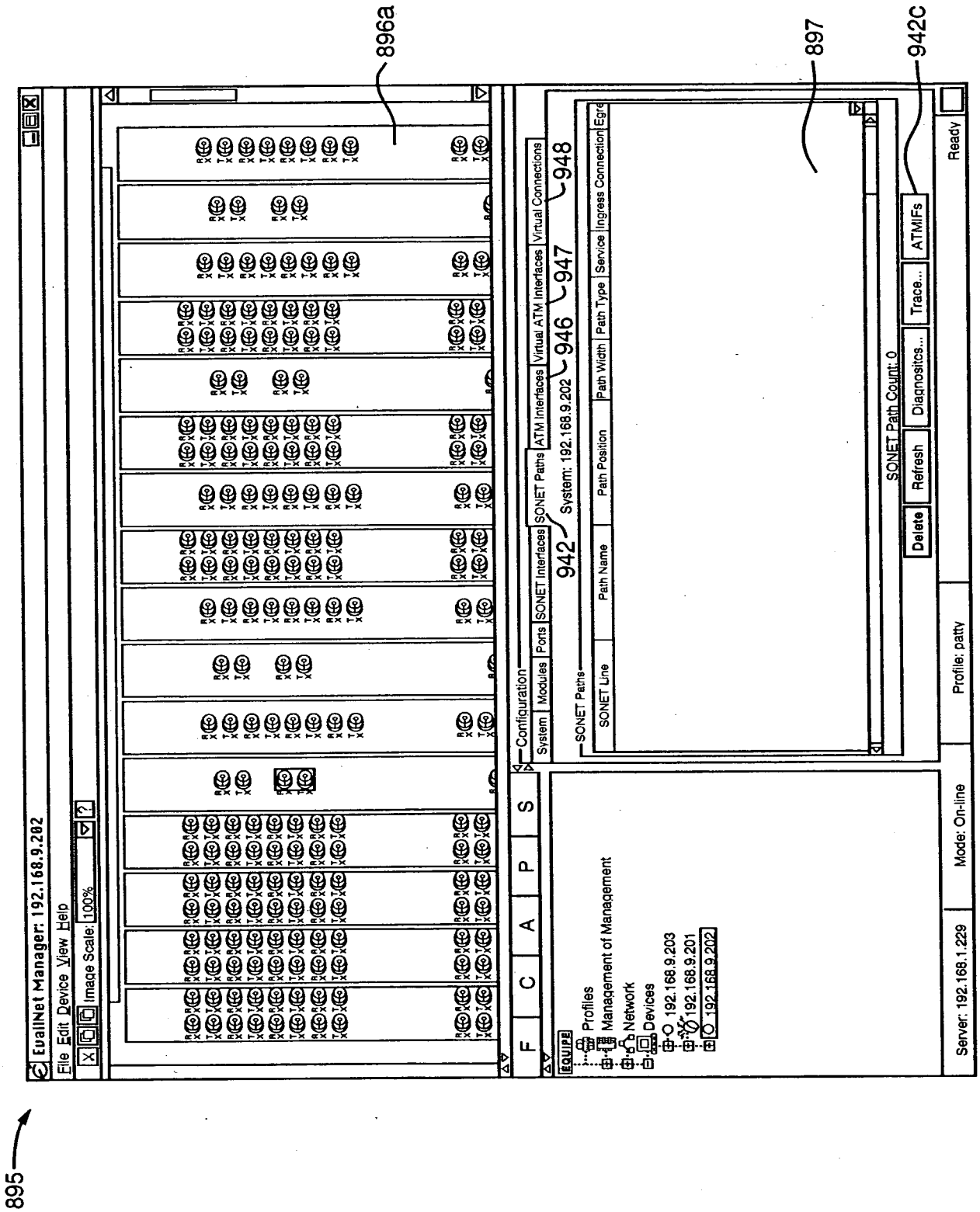

896a
897
942c
895
EvalINet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
942
System: 192.168.9.202
946
947
948
SONET Paths
SONET Line
Path Name
Path Position
Path Width
Path Type
Service
Ingress Connection
SONET Path Count: 0
Delete
Refresh
Diagnositcs...
Trace...
ATMIFs
Ready
Profile: patty
Server: 192.168.1.229
Mode: On-line
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.203
192.168.9.201
192.168.9.202

FIG. 4W

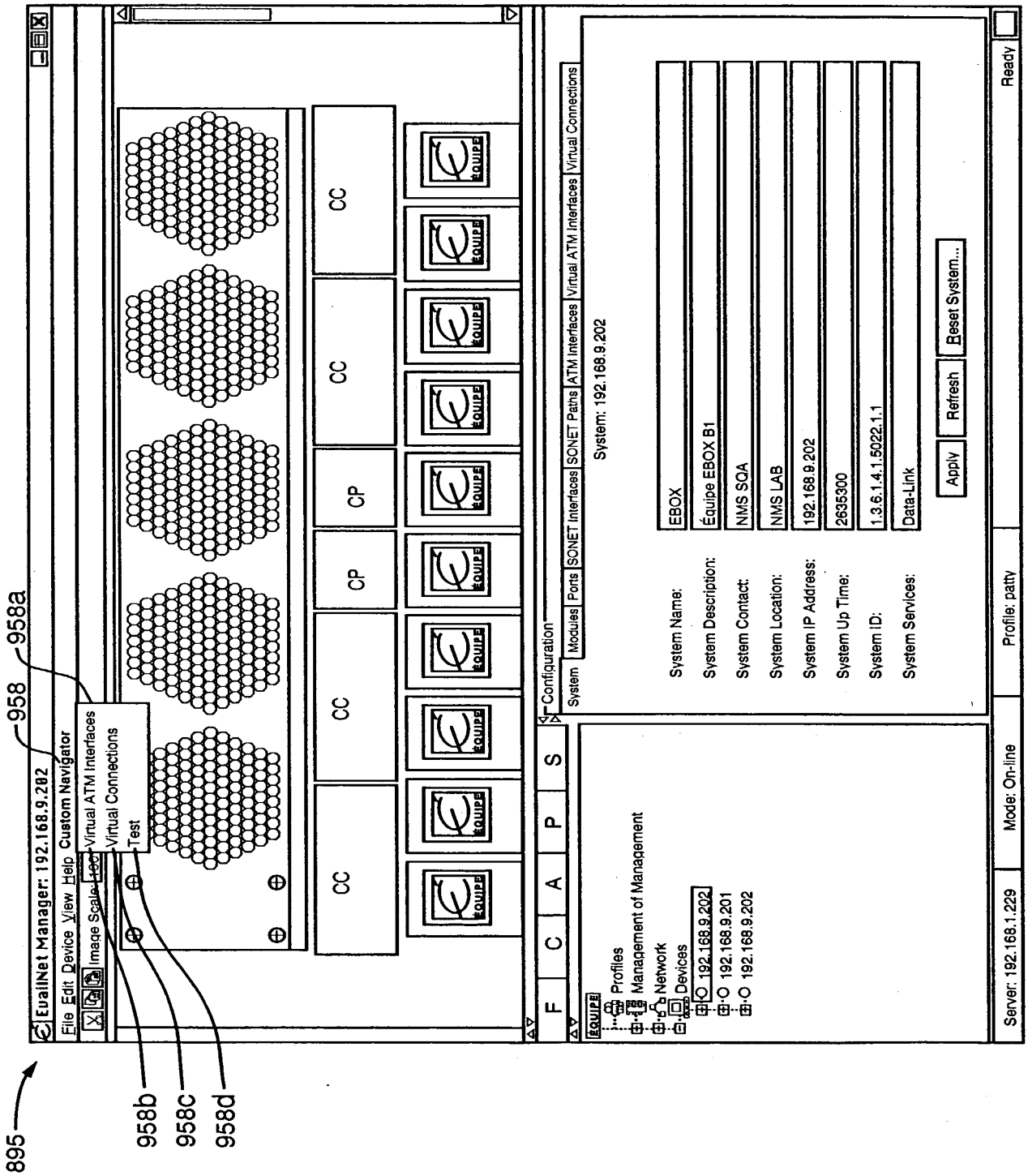

EvalNet Manager: 192.168.9.202
File Edit Device View Help Custom Navigator
Image Scale Help
Virtual ATM Interfaces
Virtual Connections
Test
958
958a
895
958b
958c
958d
CC
CP
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 2635300
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4X

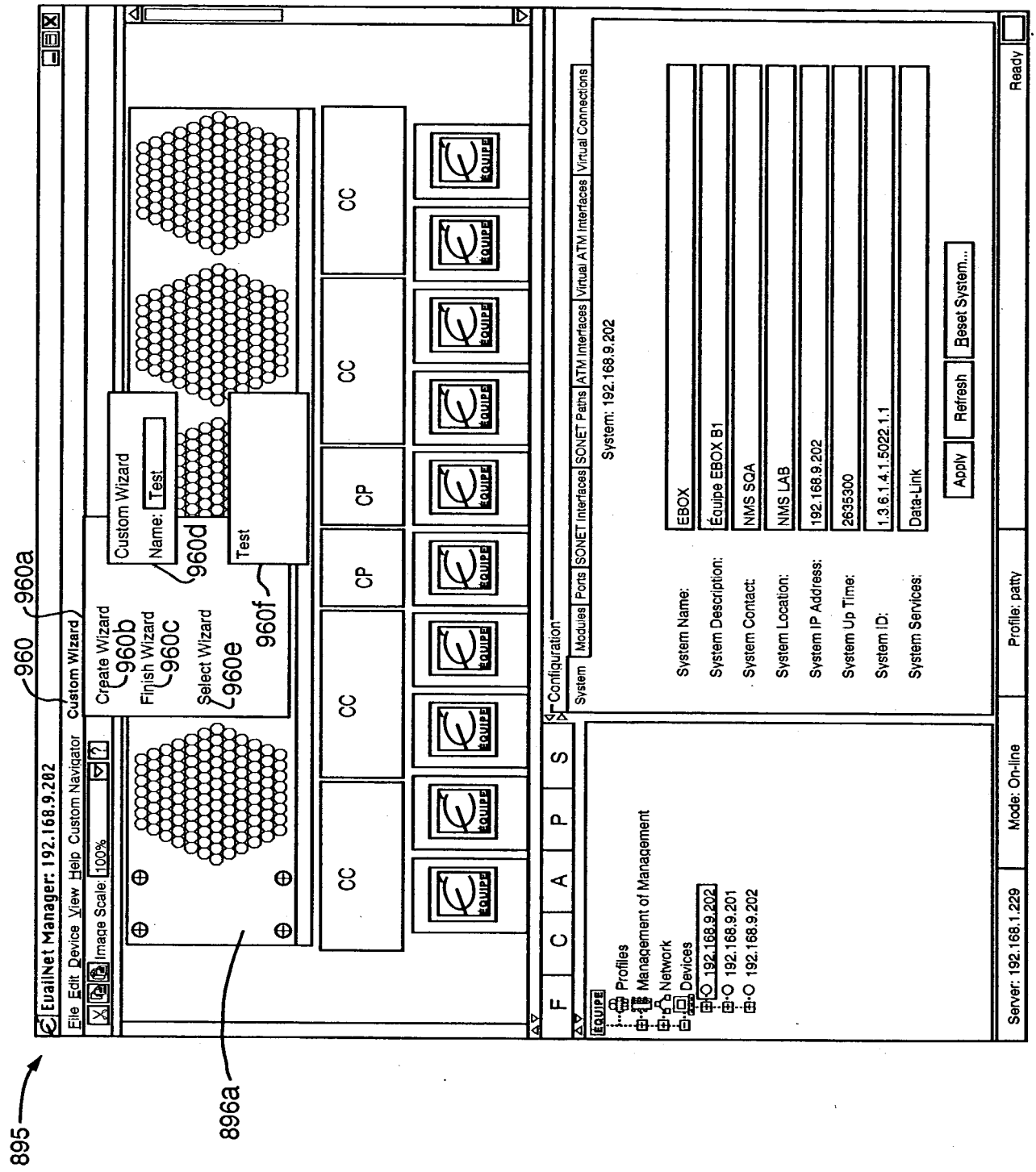

895
896a
960
960a
EquiNet Manager: 192.168.9.202
File Edit Device View Help Custom Navigator
Custom Wizard
Image Scale: 100%
Create Wizard
960b
Finish Wizard
960c
Select Wizard
960e
Custom Wizard
Name: Test
960d
Test
960f
CC
CP
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 2635300
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply
Refresh
Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 4Y

961
961a
EvailNet Manager: SONET Path Configuration 11/5/1
System: 192.168.9.202
SONET Line
Slot
Port
Type
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
4
STS-12c
paths
Custom Configuration
Next
Cancel
961b

FIG. 4Z

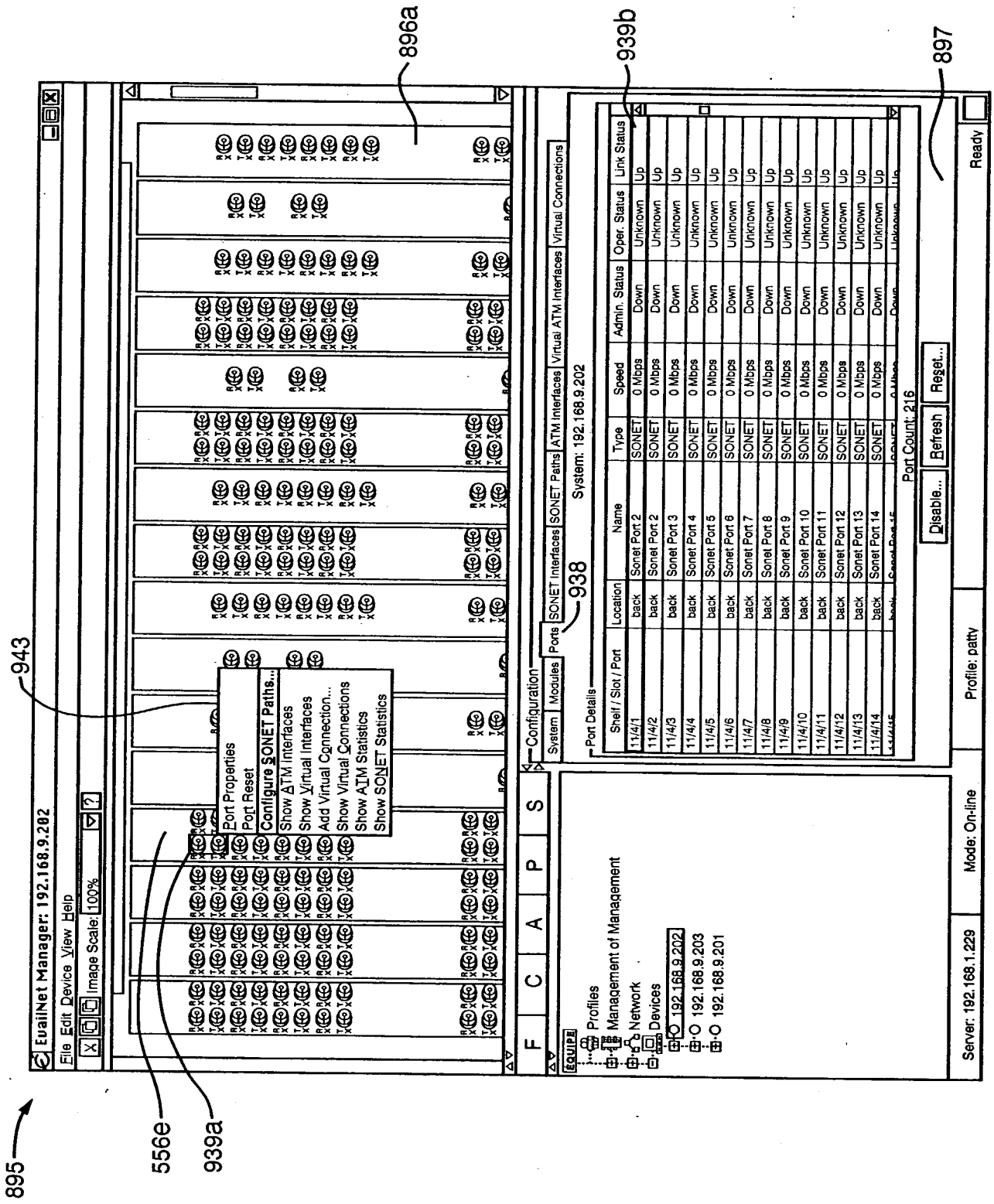

895
556e
939a
943
896a
939b
897
938
EvaliNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Port Properties
Port Reset
Configure SONET Paths...
Show ATM Interfaces
Show Virtual Interfaces
Add Virtual Connection...
Show Virtual Connections
Show ATM Statistics
Show SONET Statistics
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
Port Details
Shelf / Slot / Port
Location
Name
Type
Speed
Admin. Status
Oper. Status
Lnk Status
11/4/1 back Sonet Port 2 SONET 0 Mbps Down Unknown Up
11/4/2 back Sonet Port 2 SONET 0 Mbps Down Unknown Up
11/4/3 back Sonet Port 3 SONET 0 Mbps Down Unknown Up
11/4/4 back Sonet Port 4 SONET 0 Mbps Down Unknown Up
11/4/5 back Sonet Port 5 SONET 0 Mbps Down Unknown Up
11/4/6 back Sonet Port 6 SONET 0 Mbps Down Unknown Up
11/4/7 back Sonet Port 7 SONET 0 Mbps Down Unknown Up
11/4/8 back Sonet Port 8 SONET 0 Mbps Down Unknown Up
11/4/9 back Sonet Port 9 SONET 0 Mbps Down Unknown Up
11/4/10 back Sonet Port 10 SONET 0 Mbps Down Unknown Up
11/4/11 back Sonet Port 11 SONET 0 Mbps Down Unknown Up
11/4/12 back Sonet Port 12 SONET 0 Mbps Down Unknown Up
11/4/13 back Sonet Port 13 SONET 0 Mbps Down Unknown Up
11/4/14 back Sonet Port 14 SONET 0 Mbps Down Unknown Up
Port Count: 216
Disable... Refresh Reset...
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5A

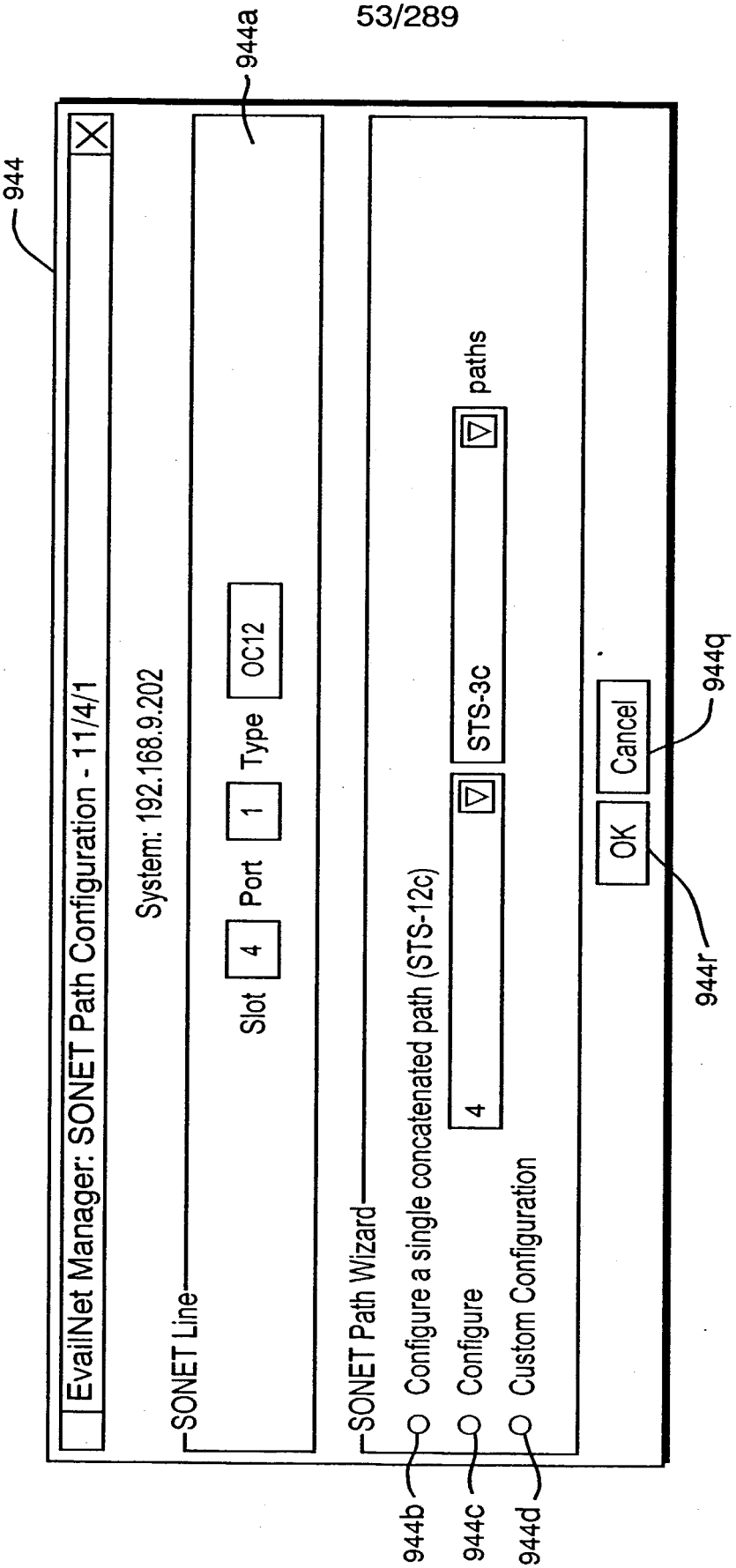

944
944a
EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure 4 STS-3c paths
Custom Configuration
OK
Cancel
944q
944r
944b
944c
944d

FIG. 5B

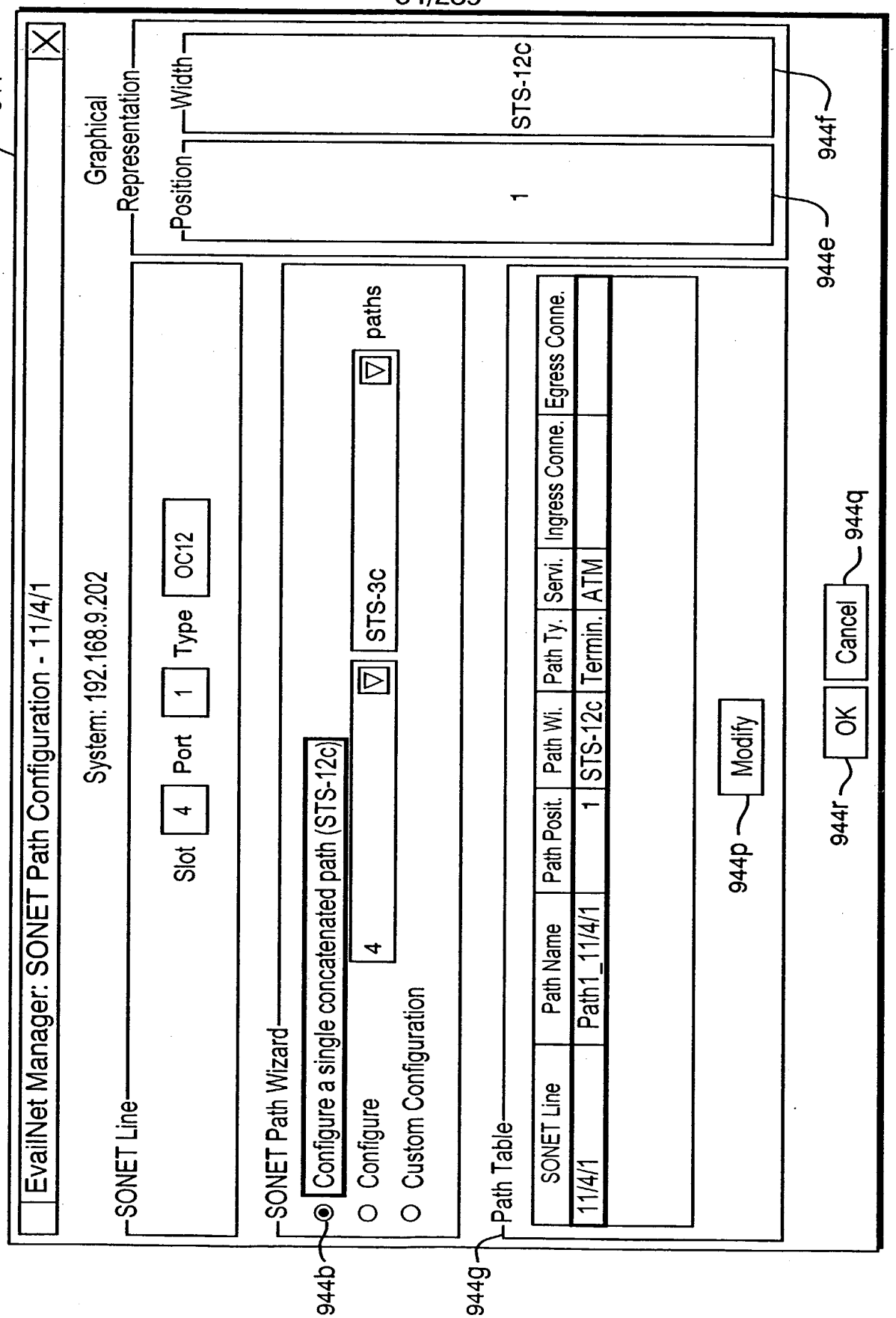

944
EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
Graphical Representation
Position
Width
1
STS-12c
944e
944f
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure 4 paths
Custom Configuration
STS-3c
944b
944g
Path Table
SONET Line | Path Name | Path Posit. | Path Wi. | Path Ty. | Servi. | Ingress Conne. | Egress Conne.
11/4/1 | Path1_11/4/1 | 1 | STS-12c | Termin. | ATM
944p
Modify
944r
OK
Cancel
944q

FIG. 5C

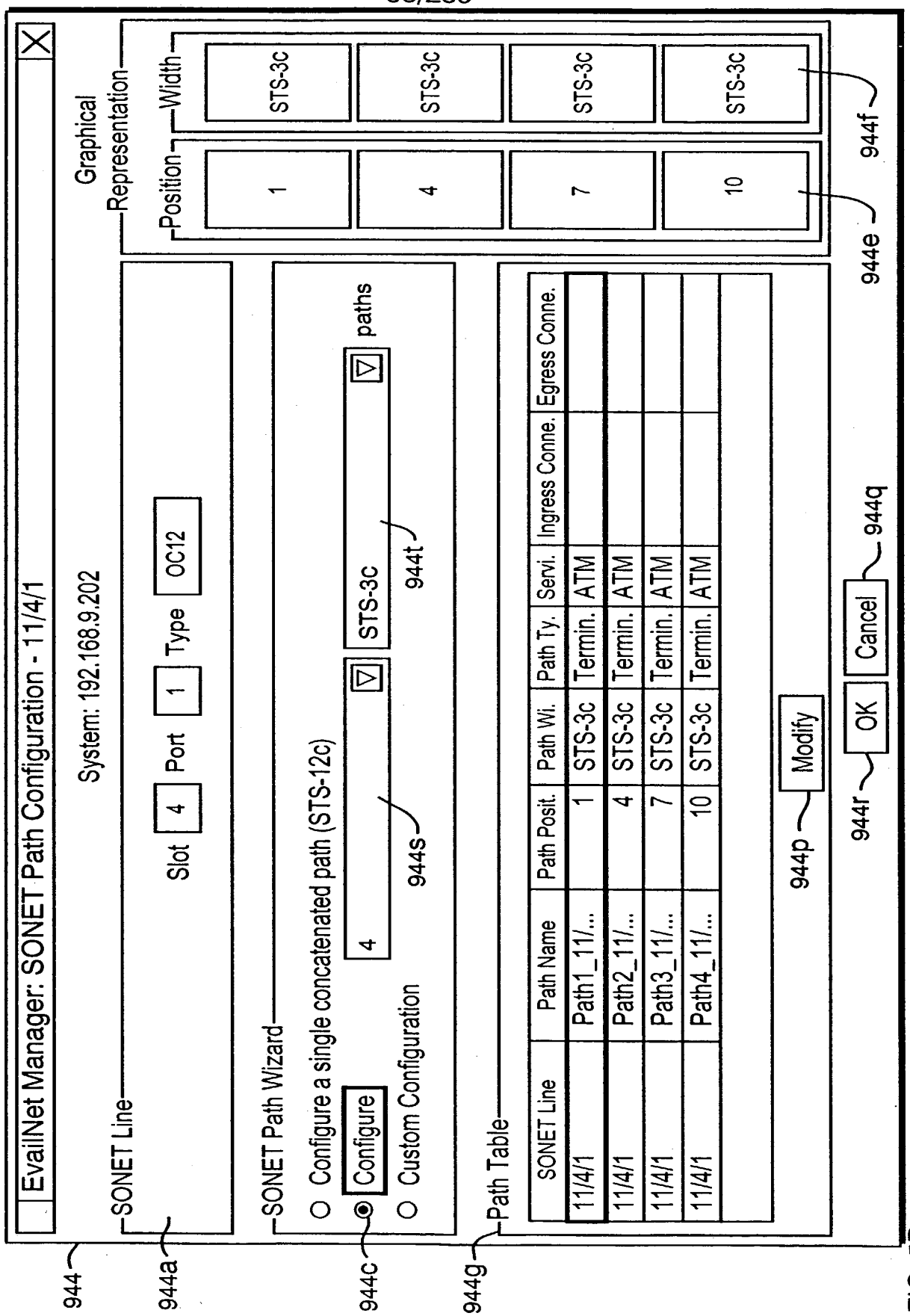

EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
Graphical Representation
Position
Width
1
STS-3c
4
STS-3c
7
STS-3c
10
STS-3c
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure
Custom Configuration
4
STS-3c
paths
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/4/1
Path1_11/...
1
STS-3c
Termin.
ATM
11/4/1
Path2_11/...
4
STS-3c
Termin.
ATM
11/4/1
Path3_11/...
7
STS-3c
Termin.
ATM
11/4/1
Path4_11/...
10
STS-3c
Termin.
ATM
Modify
OK
Cancel
944
944a
944c
944g
944s
944t
944p
944r
944e
944f
944q

FIG. 5D

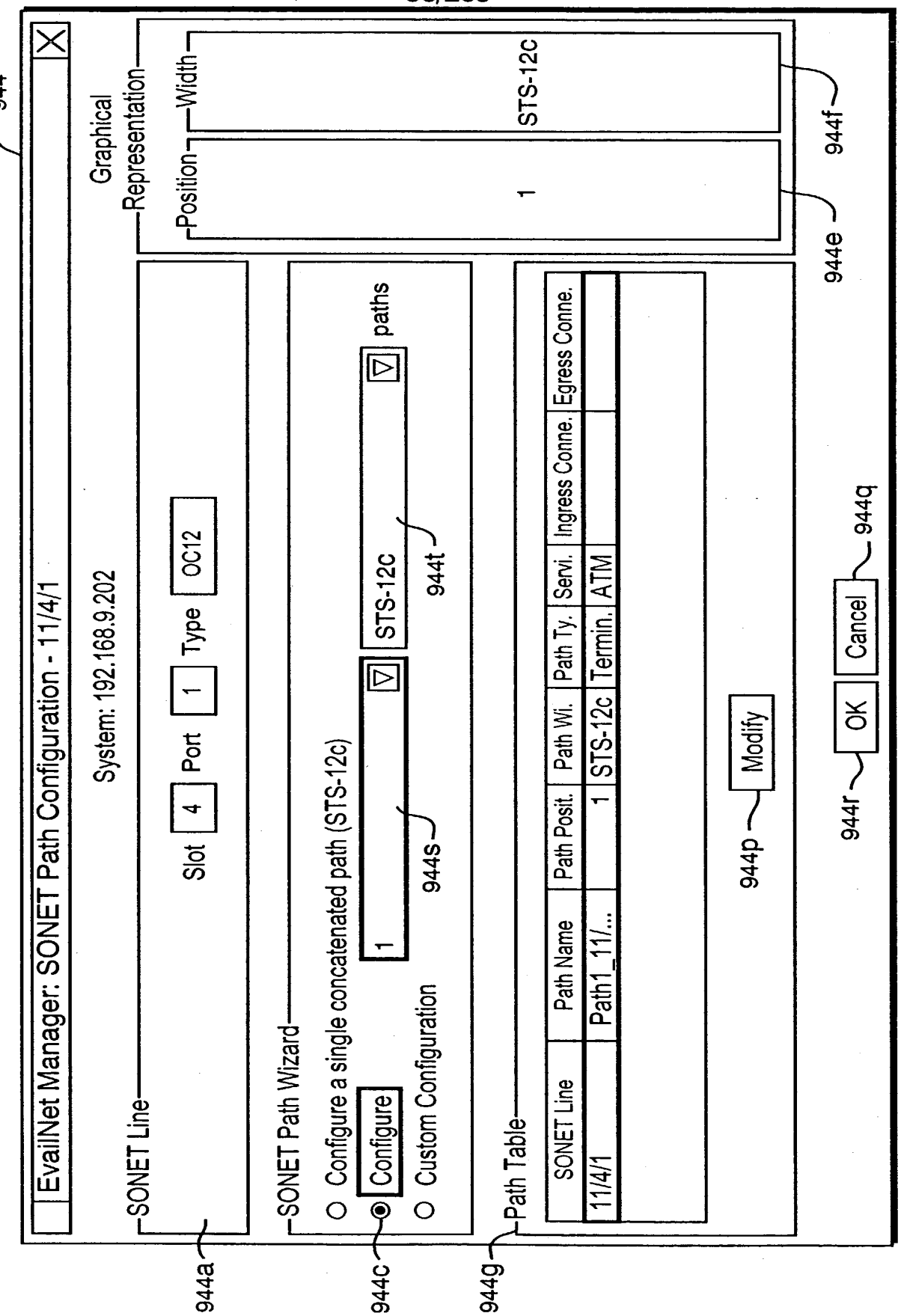

944
EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
Graphical Representation
Position
Width
1
STS-12c
944e
944f
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure
1
STS-12c
paths
Custom Configuration
944s
944t
944a
944c
944g
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/4/1
Path1_11/...
1
STS-12c
Termin.
ATM
Modify
944p
OK
Cancel
944r
944q

FIG. 5E

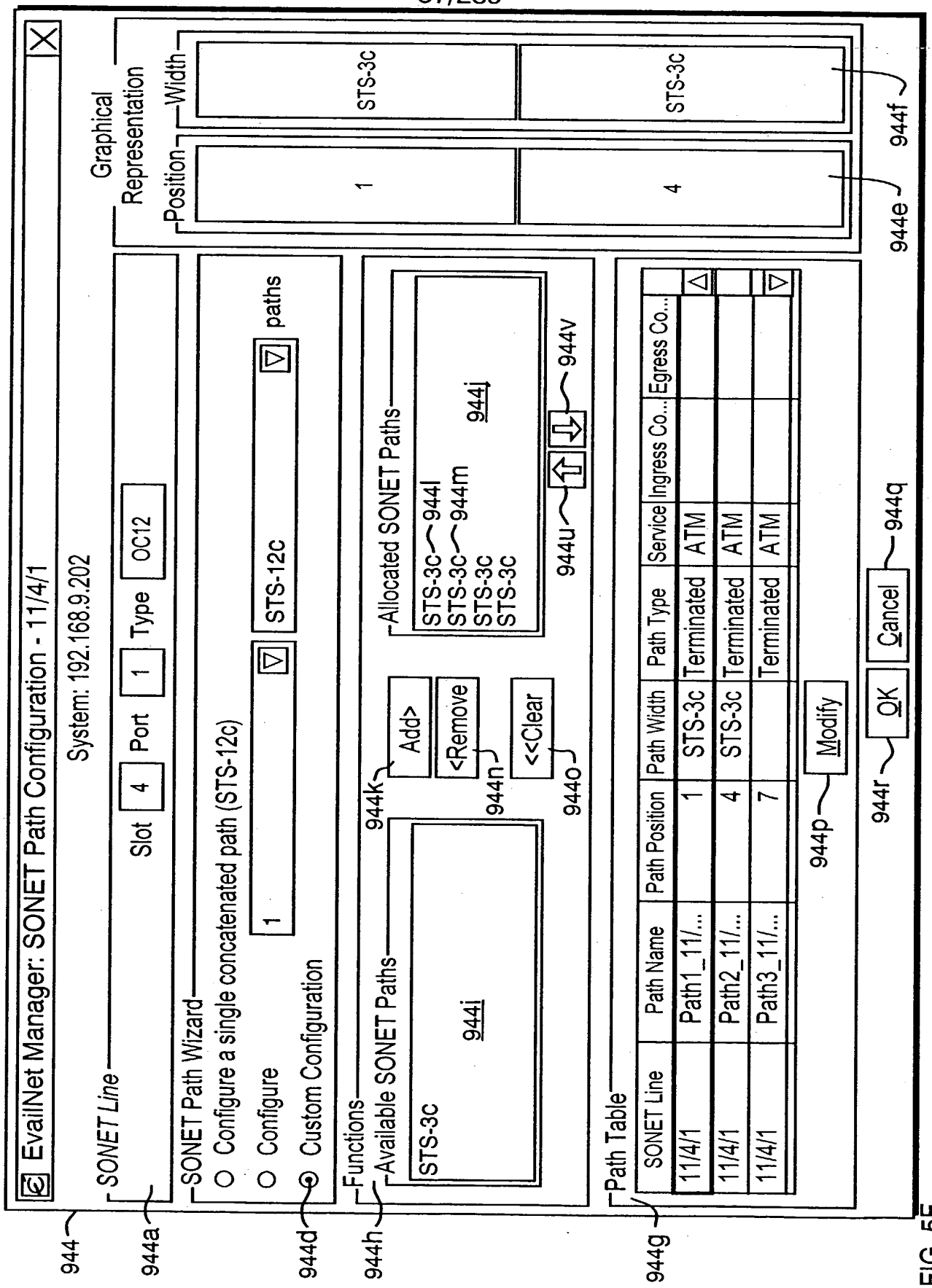

EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure
Custom Configuration
1
STS-12c
paths
Functions
Available SONET Paths
STS-3c
944i
Add>
<Remove
<<Clear
Allocated SONET Paths
STS-3c 944l
STS-3c 944m
STS-3c
STS-3c
944i
Graphical Representation
Position
Width
1
4
STS-3c
STS-3c
Path Table
SONET Line | Path Name | Path Position | Path Width | Path Type | Service | Ingress Co... | Egress Co...
11/4/1 | Path1_11/... | 1 | STS-3c | Terminated | ATM
11/4/1 | Path2_11/... | 4 | STS-3c | Terminated | ATM
11/4/1 | Path3_11/... | 7 | | Terminated | ATM
Modify
OK
Cancel
944
944a
944d
944h
944g
944k
944n
944o
944u
944v
944p
944r
944q
944e
944f

FIG. 5F

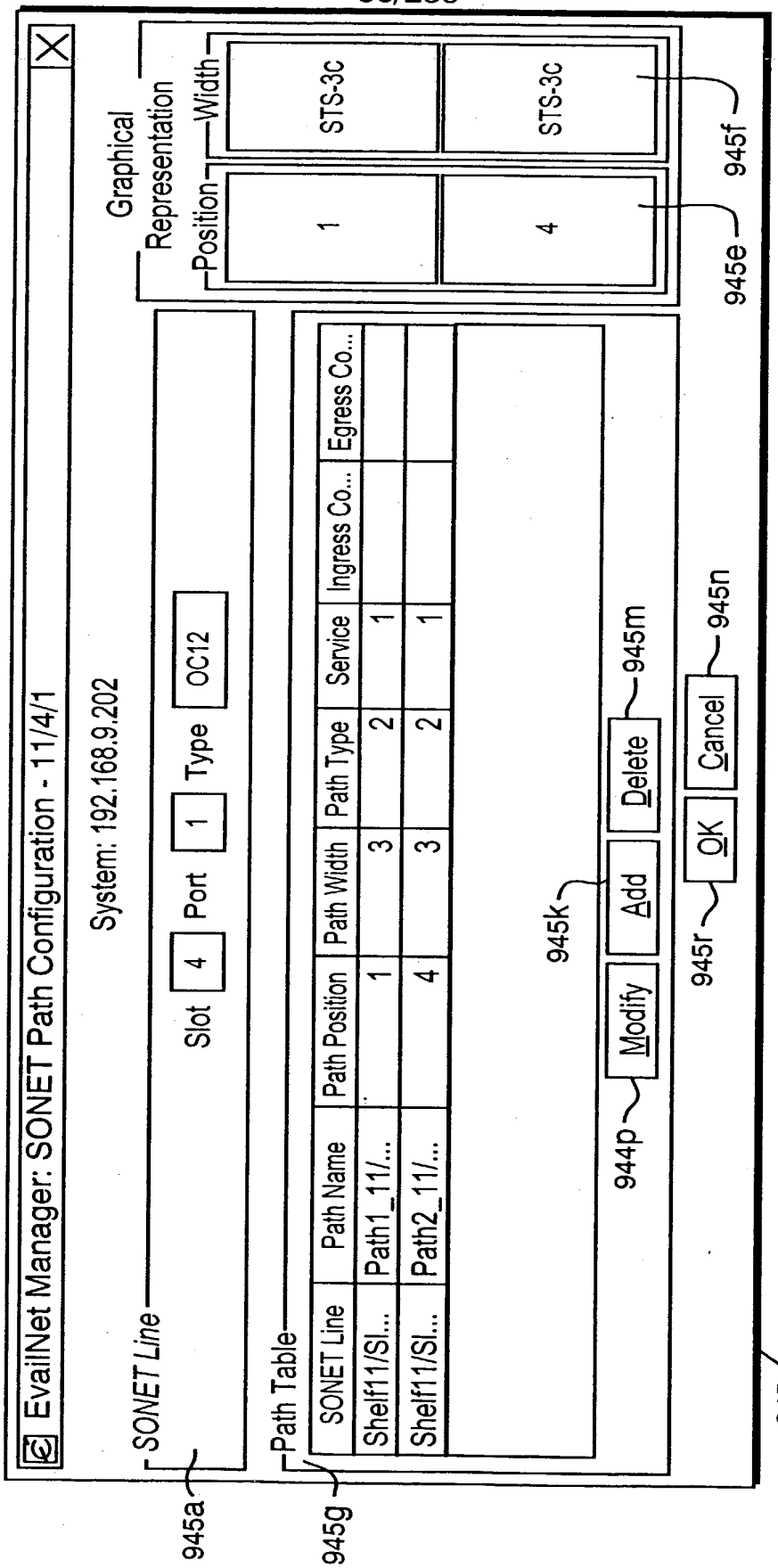

EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 4 Port 1 Type OC12
Graphical Representation
Position
Width
1
4
STS-3c
STS-3c
Path Table
SONET Line
Path Name
Path Position
Path Width
Path Type
Service
Ingress Co...
Egress Co...
Shelf11/Sl...
Path1_11/...
1
3
2
1
Shelf11/Sl...
Path2_11/...
4
3
2
1
Modify
Add
Delete
OK
Cancel
945a
945g
945k
944p
945m
945r
945n
945e
945f
945

FIG. 5G

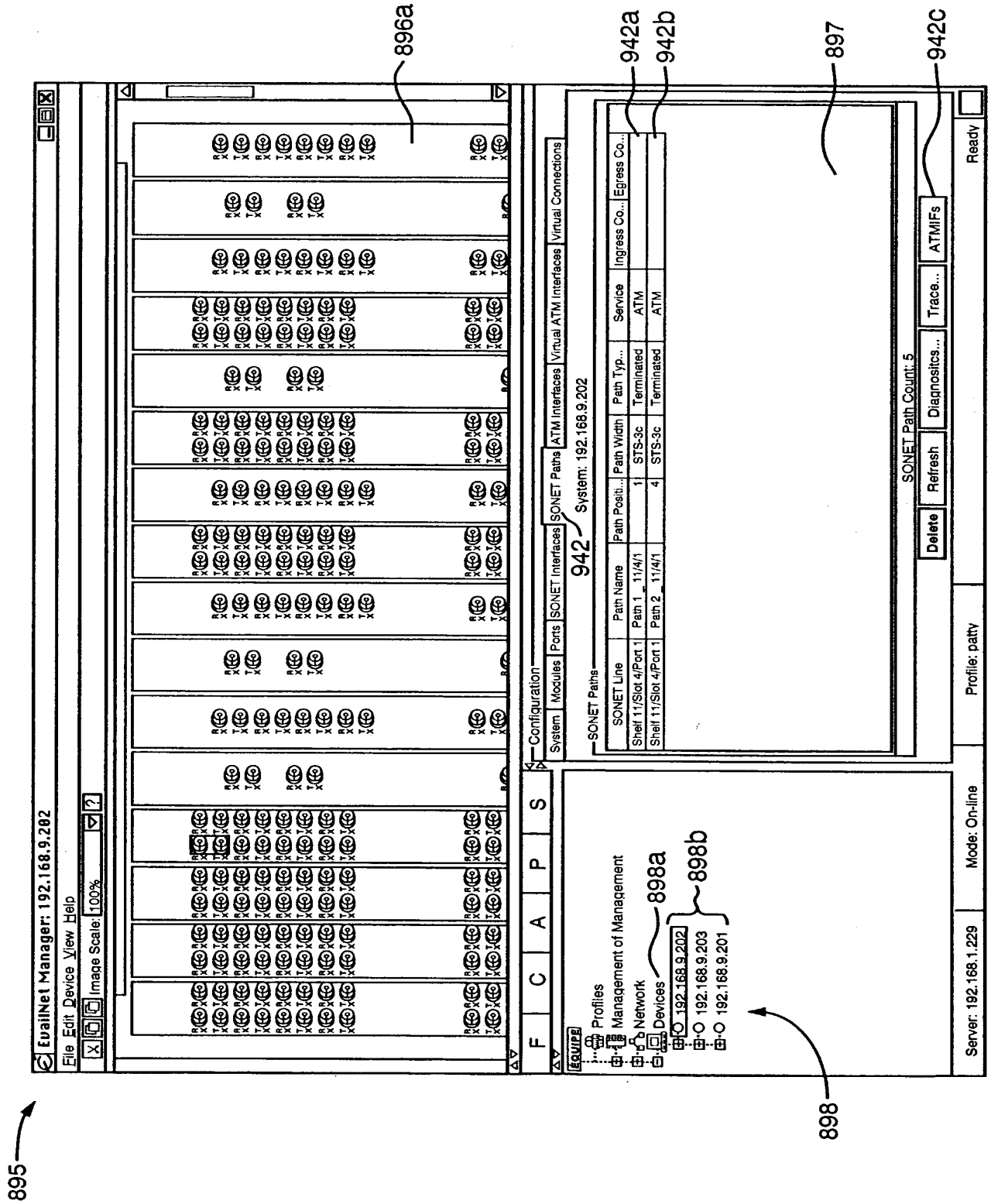

895
896a
897
898
898a
898b
942
942a
942b
942c
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
SONET Paths
System: 192.168.9.202
SONET Line
Path Name
Path Positi...
Path Width
Path Typ...
Service
Ingress Co...
Egress Co...
Shelf 11/Slot 4/Port 1
Path 1 _11/4/1
1
STS-3c
Terminated
ATM
Shelf 11/Slot 4/Port 1
Path 2 _11/4/1
4
STS-3c
Terminated
ATM
SONET Path Count: 5
Delete
Refresh
Diagnositcs...
Trace...
ATMIFs
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5H

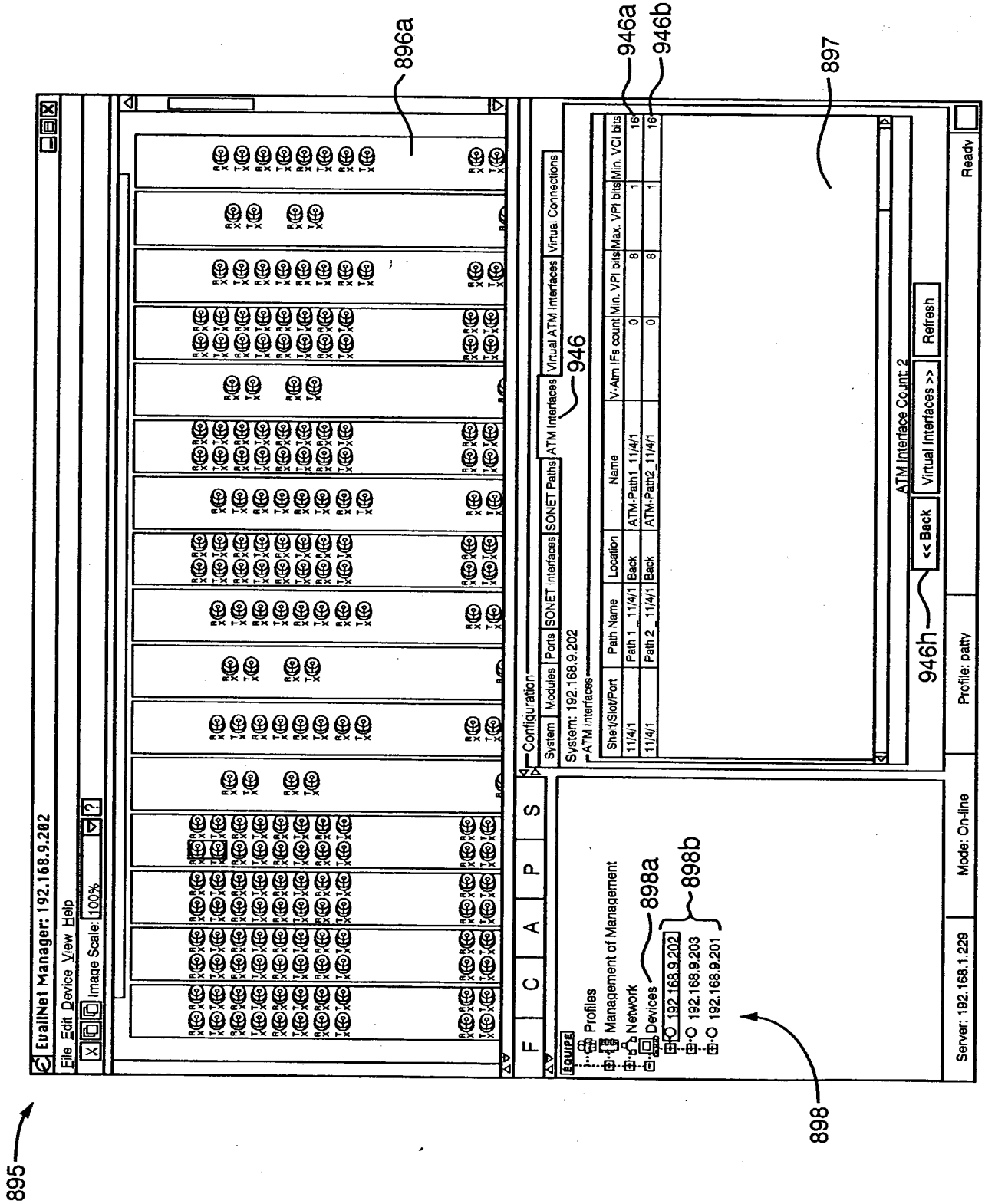

895
896a
946a
946b
897
946
946h
898
898a
898b
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
ATM Interfaces
Shelf/Slot/Port
Path Name
Location
Name
V-Atm IFs count
Min. VPI bits
Max. VPI bits
Min. VCI bits
11/4/1
Path 1 _ 11/4/1
Back
ATM-Path1_11/4/1
0
8
1
16
11/4/1
Path 2 _ 11/4/1
Back
ATM-Path2_11/4/1
0
8
1
16
<< Back
Virtual Interfaces >>
Refresh
ATM Interface Count: 2
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5I

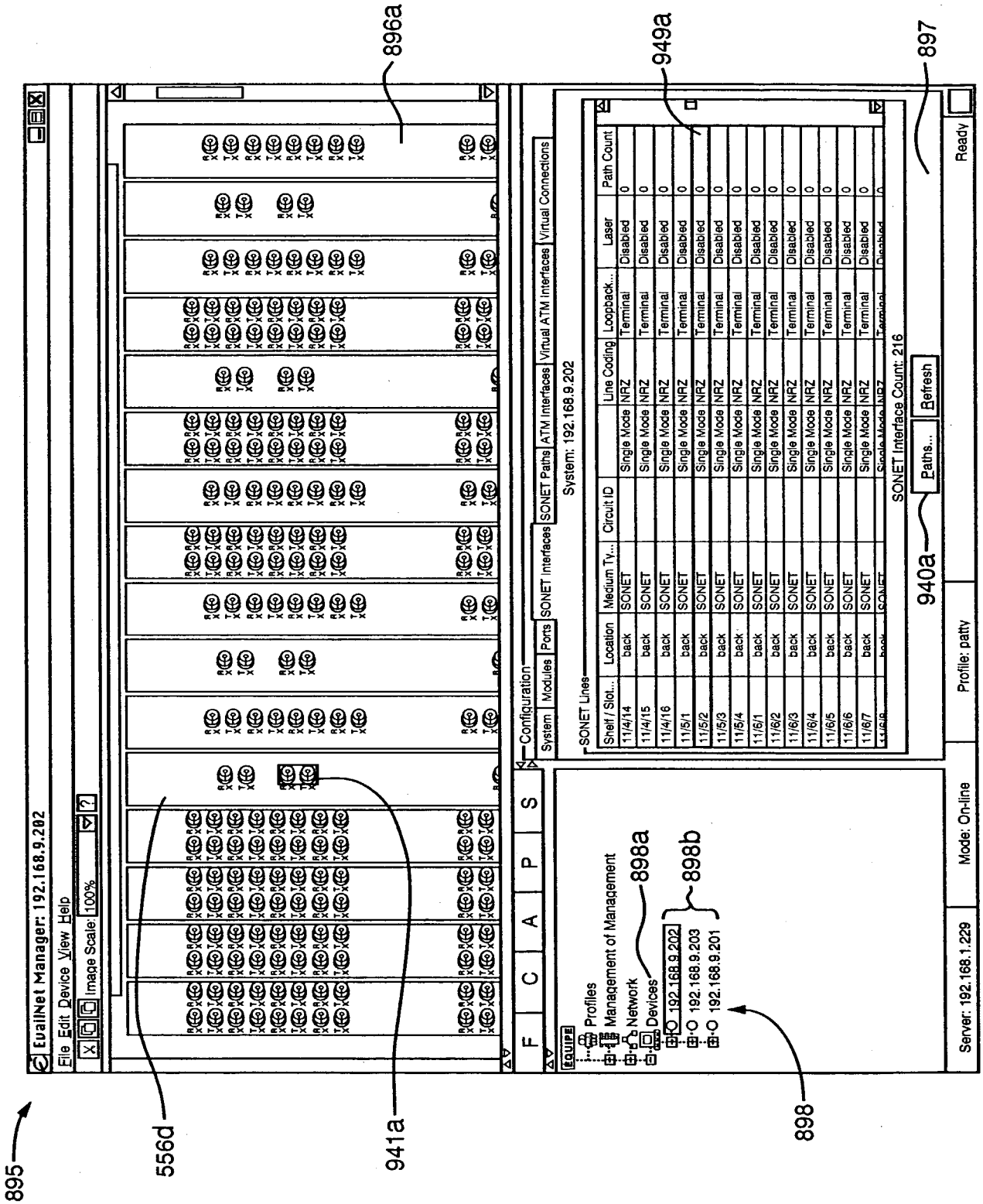

895
556d
941a
898
898a
898b
896a
949a
897
940a
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
SONET Lines
SONET Interface Count: 216
Paths...
Refresh
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5J

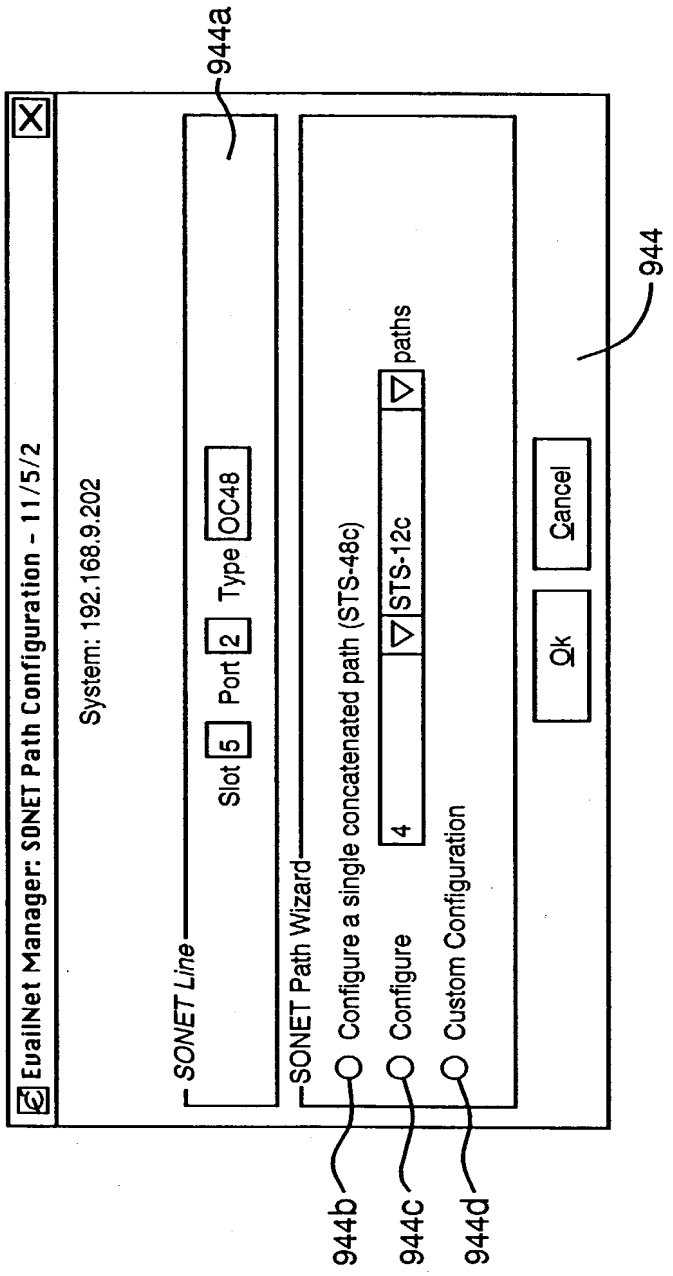

EvalNet Manager: SONET Path Configuration - 11/5/2
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
944a
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
4
STS-12c
paths
Custom Configuration
Ok
Cancel
944
944b
944c
944d

FIG. 5K

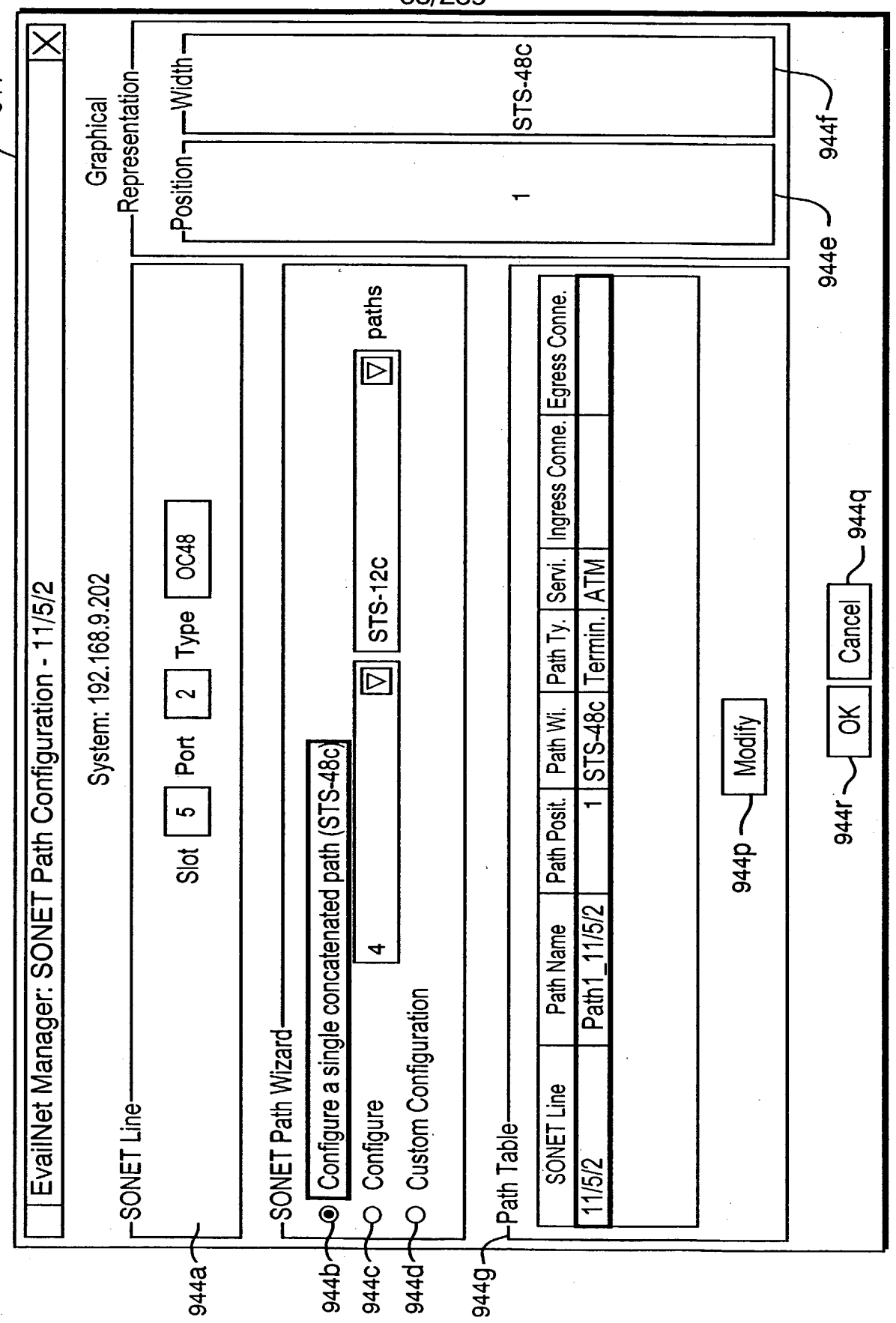

944
EvailNet Manager: SONET Path Configuration - 11/5/2
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
Graphical Representation
Position
Width
1
STS-48c
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
4
STS-12c
paths
Custom Configuration
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/5/2
Path1_11/5/2
1
STS-48c
Termin.
ATM
Modify
OK
Cancel
944a
944b
944c
944d
944e
944f
944g
944p
944q
944r

FIG. 5L

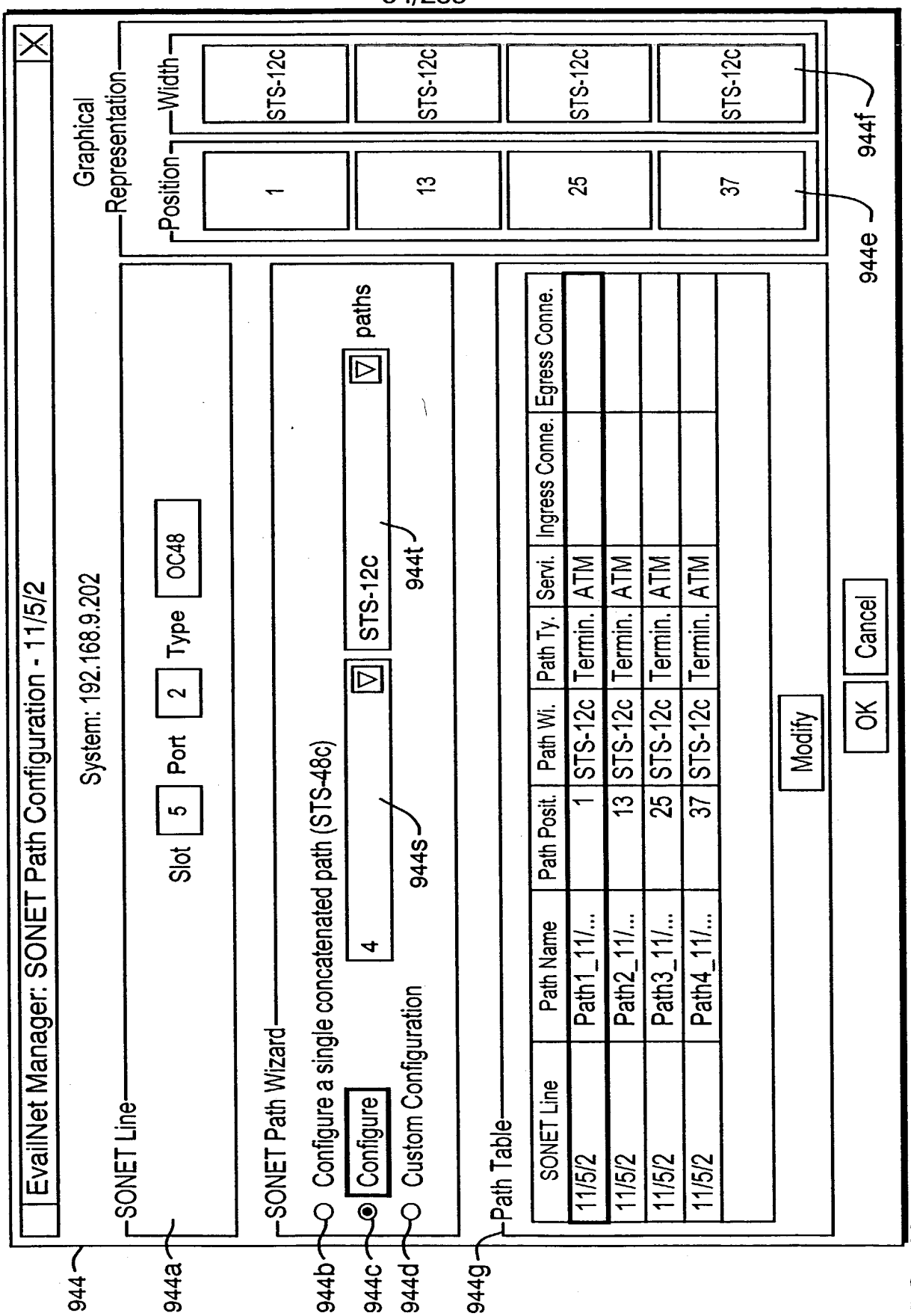

EvailNet Manager: SONET Path Configuration - 11/5/2
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
Graphical Representation
Position
Width
1
13
25
37
STS-12c
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
Custom Configuration
4
STS-12c
paths
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/5/2
Path1_11/...
Path2_11/...
Path3_11/...
Path4_11/...
Termin.
ATM
Modify
OK
Cancel
944
944a
944b
944c
944d
944e
944f
944g
944s
944t

FIG. 5M

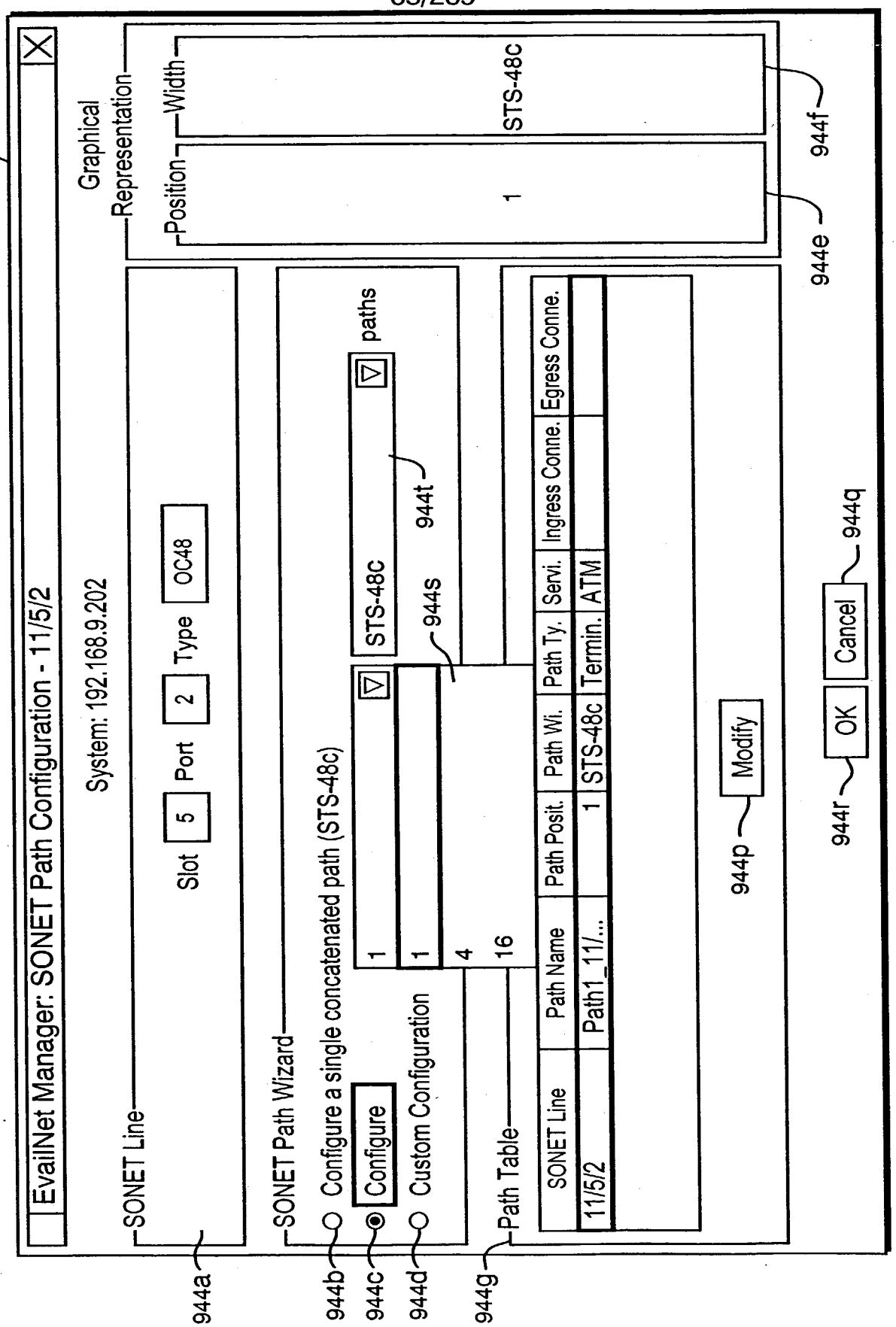

944
EvailNet Manager: SONET Path Configuration - 11/5/2
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
Graphical Representation
Position
Width
1
STS-48c
944f
944e
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
Custom Configuration
1
1
4
16
STS-48c
paths
944t
944s
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/5/2
Path1_11/...
1
STS-48c
Termin.
ATM
944p
Modify
944r
OK
Cancel
944q
944a
944b
944c
944d
944g

FIG. 5N

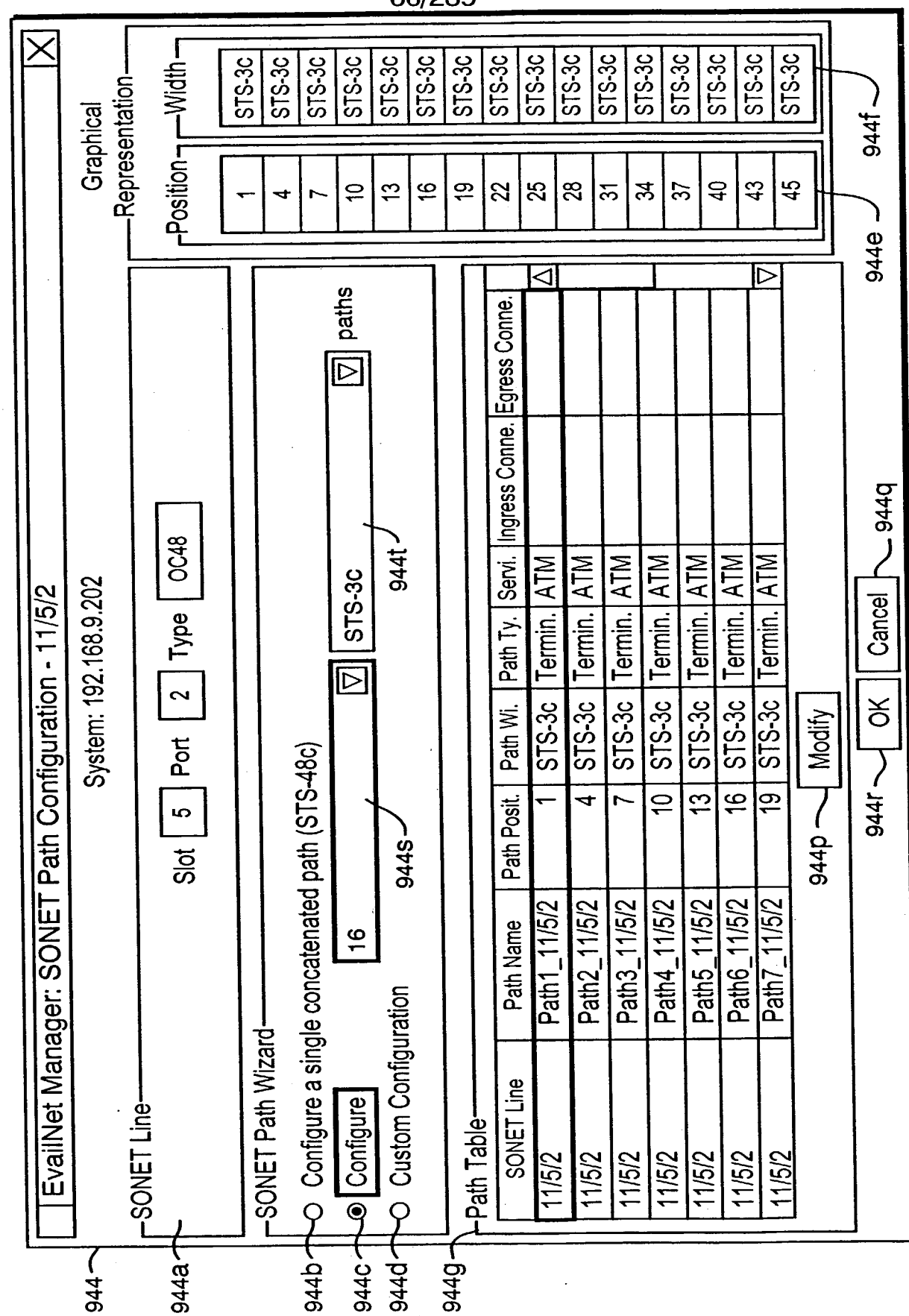

EvailNet Manager: SONET Path Configuration - 11/5/2
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
Graphical Representation
Position
Width
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 45
STS-3c
SONET Path Wizard
Configure a single concatenated path (STS-48c)
Configure
16
STS-3c
paths
Custom Configuration
Path Table
SONET Line | Path Name | Path Posit. | Path Wi. | Path Ty. | Servi. | Ingress Conne. | Egress Conne.
11/5/2 | Path1_11/5/2 | 1 | STS-3c | Termin. | ATM
11/5/2 | Path2_11/5/2 | 4 | STS-3c | Termin. | ATM
11/5/2 | Path3_11/5/2 | 7 | STS-3c | Termin. | ATM
11/5/2 | Path4_11/5/2 | 10 | STS-3c | Termin. | ATM
11/5/2 | Path5_11/5/2 | 13 | STS-3c | Termin. | ATM
11/5/2 | Path6_11/5/2 | 16 | STS-3c | Termin. | ATM
11/5/2 | Path7_11/5/2 | 19 | STS-3c | Termin. | ATM
Modify
OK
Cancel
944
944a
944b
944c
944d
944g
944p
944q
944r
944s
944t
944e
944f

FIG. 5O

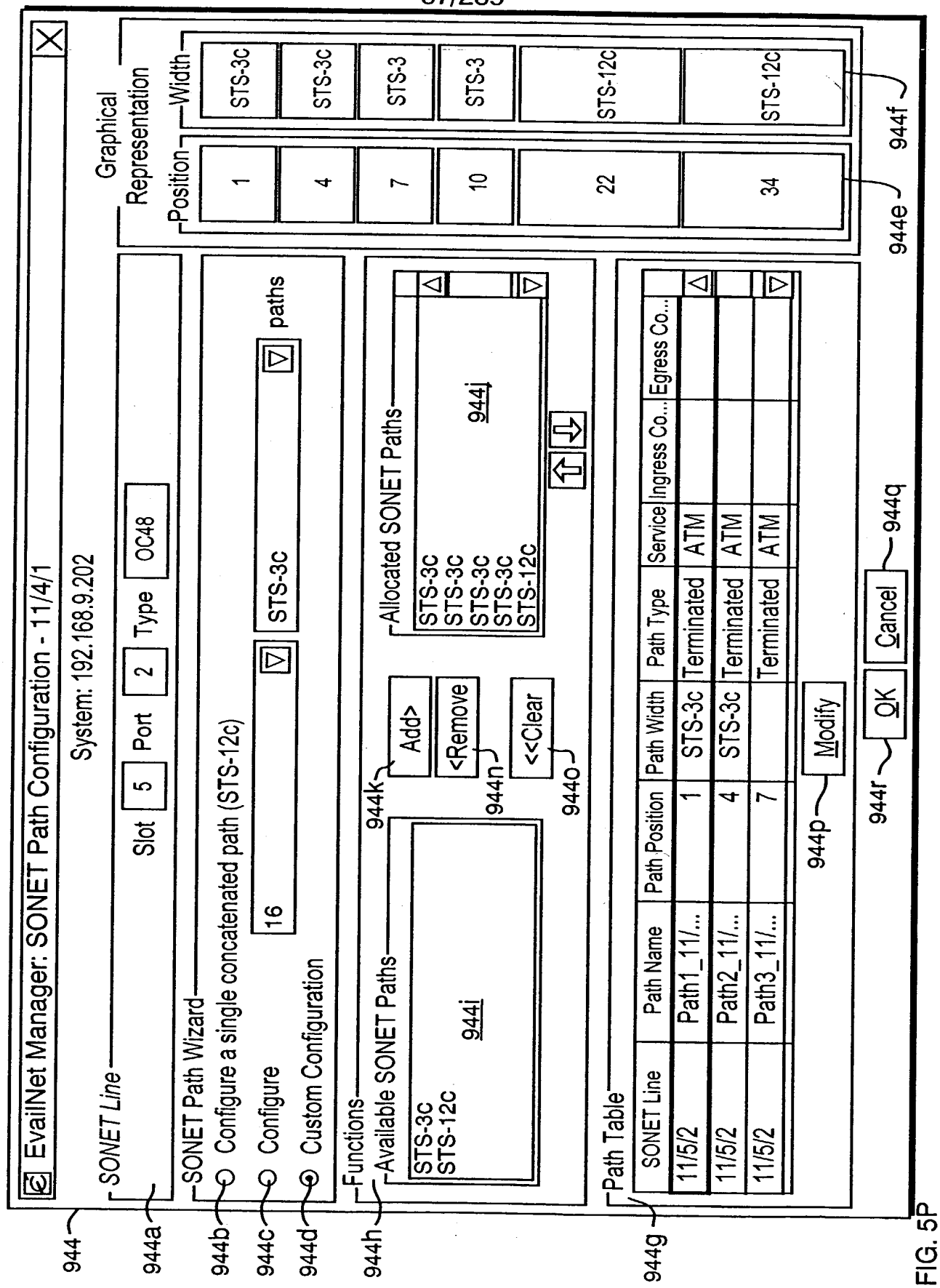

EvailNet Manager: SONET Path Configuration - 11/4/1
System: 192.168.9.202
SONET Line
Slot 5 Port 2 Type OC48
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure 16 STS-3c paths
Custom Configuration
Functions
Available SONET Paths
STS-3c
STS-12c
944i
Add>
<Remove
<<Clear
944k
944n
944o
Allocated SONET Paths
STS-3c
STS-3c
STS-3c
STS-3c
STS-12c
944j
Graphical Representation
Position
Width
1 STS-3c
4 STS-3c
7 STS-3
10 STS-3
22 STS-12c
34 STS-12c
944e
944f
Path Table
SONET Line | Path Name | Path Position | Path Width | Path Type | Service | Ingress Co... | Egress Co...
11/5/2 | Path1_11/... | 1 | STS-3c | Terminated | ATM
11/5/2 | Path2_11/... | 4 | STS-3c | Terminated | ATM
11/5/2 | Path3_11/... | 7 | | Terminated | ATM
944p
Modify
944r
OK
Cancel
944q
944
944a
944b
944c
944d
944h
944g

FIG. 5P

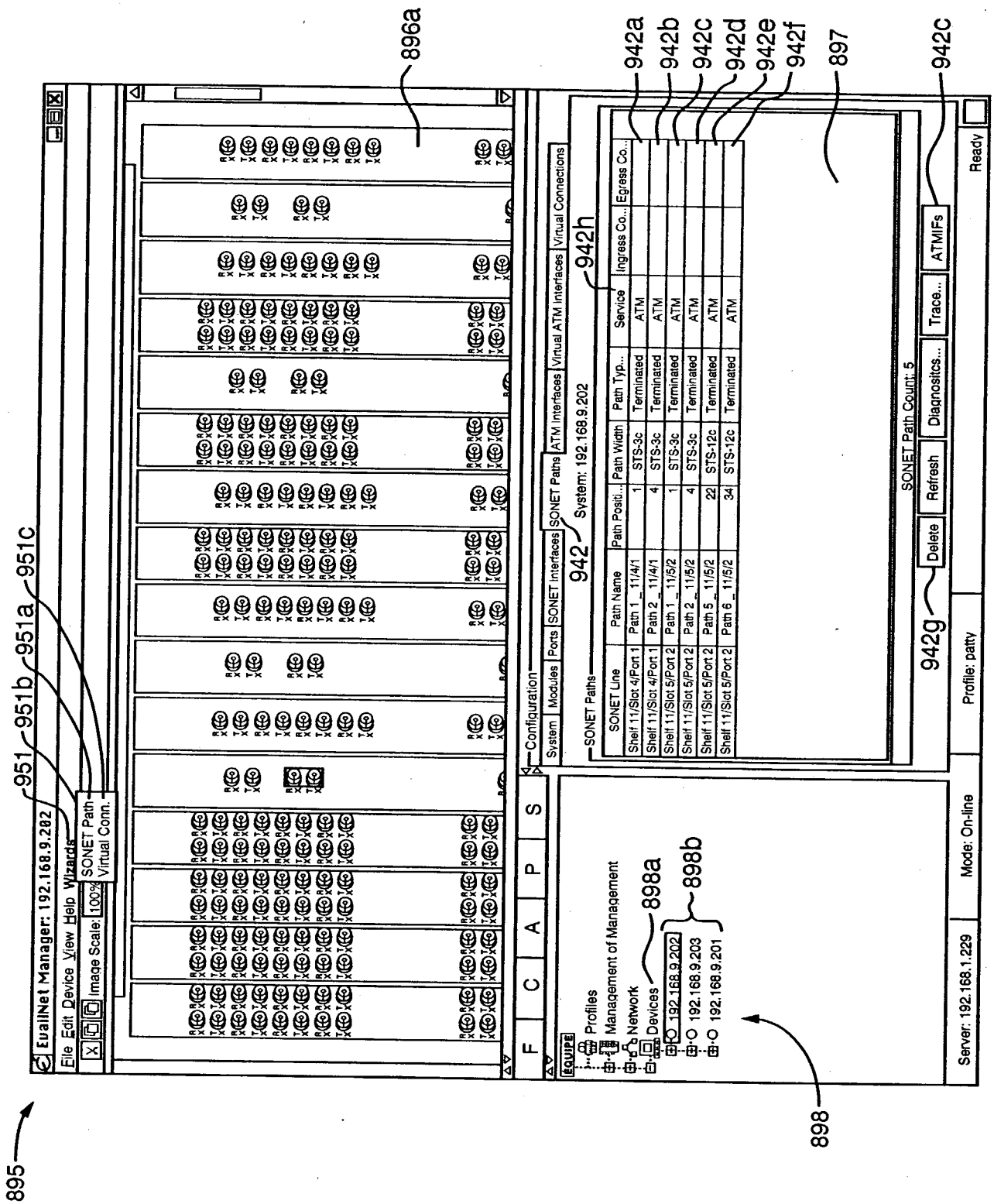

895
EvalNet Manager: 192.168.9.202
File Edit Device View Help Wizards
SONET Path
Virtual Conn.
Image Scale: 100%
951
951b
951a
951c
896a
F C A P S
Configuration
System Modules Ports SONET interfaces SONET Paths ATM interfaces Virtual ATM interfaces Virtual Connections
942
System: 192.168.9.202
942h
SONET Paths
SONET Path Count: 5
942a
942b
942c
942d
942e
942f
897
942c
942g
Delete
Refresh
Diagnositcs...
Trace...
ATMIFs
Ready
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
898a
898b
898
Server: 192.168.1.229
Mode: On-line
Profile: patty

FIG. 5Q

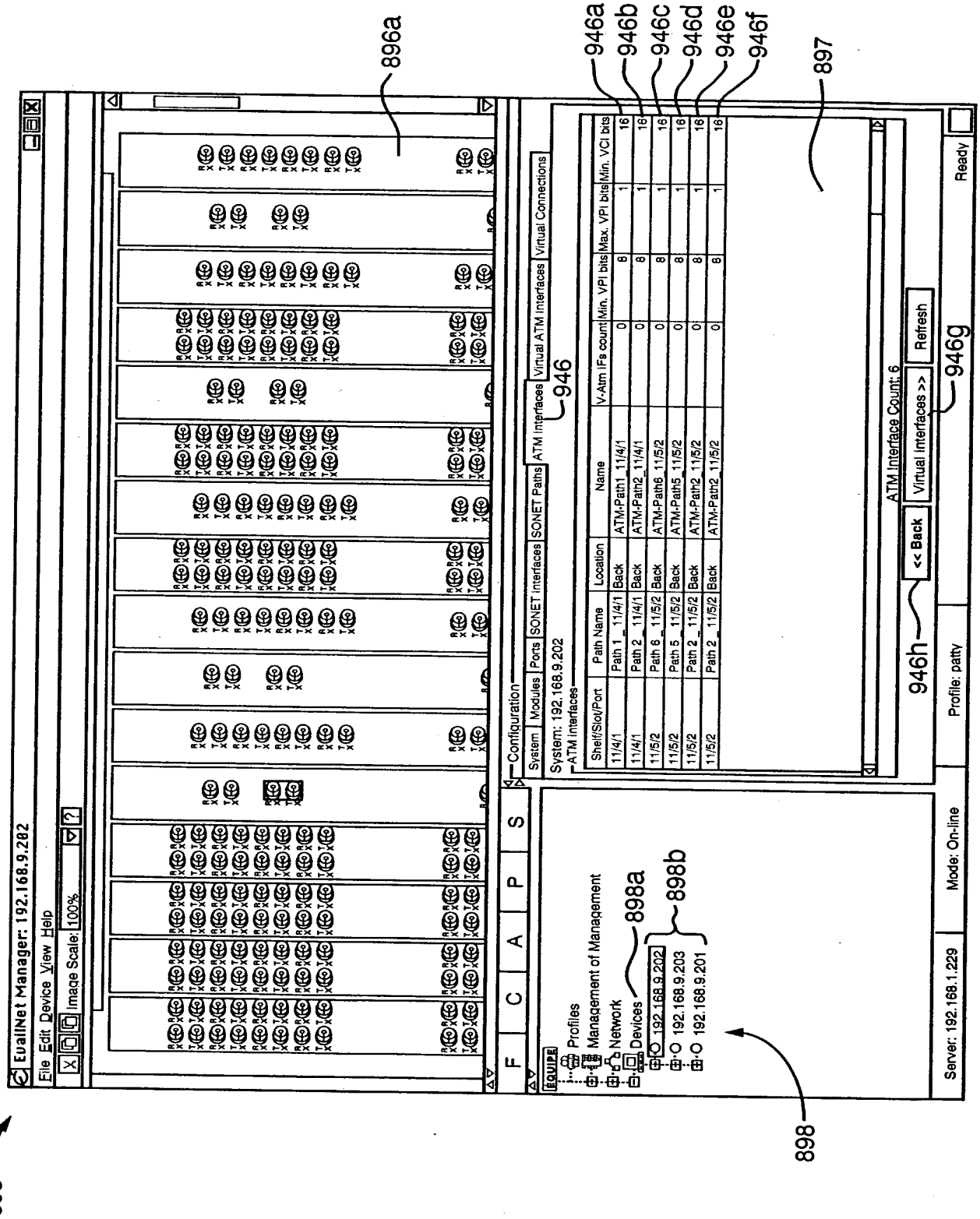

895
896a
897
898
898a
898b
946
946a
946b
946c
946d
946e
946f
946g
946h
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
F C A P S
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Configuration
System | Modules | Ports | SONET Interfaces | SONET Paths | ATM Interfaces | Virtual ATM Interfaces | Virtual Connections
System: 192.168.9.202
ATM Interfaces
Shelf/Slot/Port | Path Name | Location | Name | V-Atm IFs count | Min. VPI bits | Max. VPI bits | Min. VCI bits
11/4/1 | Path 1 _11/4/1 | Back | ATM-Path1_11/4/1 | 0 | 8 | 1 | 16
11/4/1 | Path 2 _11/4/1 | Back | ATM-Path2_11/4/1 | 0 | 8 | 1 | 16
11/5/2 | Path 6 _11/5/2 | Back | ATM-Path6_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 5 _11/5/2 | Back | ATM-Path5_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 2 _11/5/2 | Back | ATM-Path2_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 2 _11/5/2 | Back | ATM-Path2_11/5/2 | 0 | 8 | 1 | 16
ATM Interface Count: 6
<< Back
Virtual Interfaces >>
Refresh
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5R

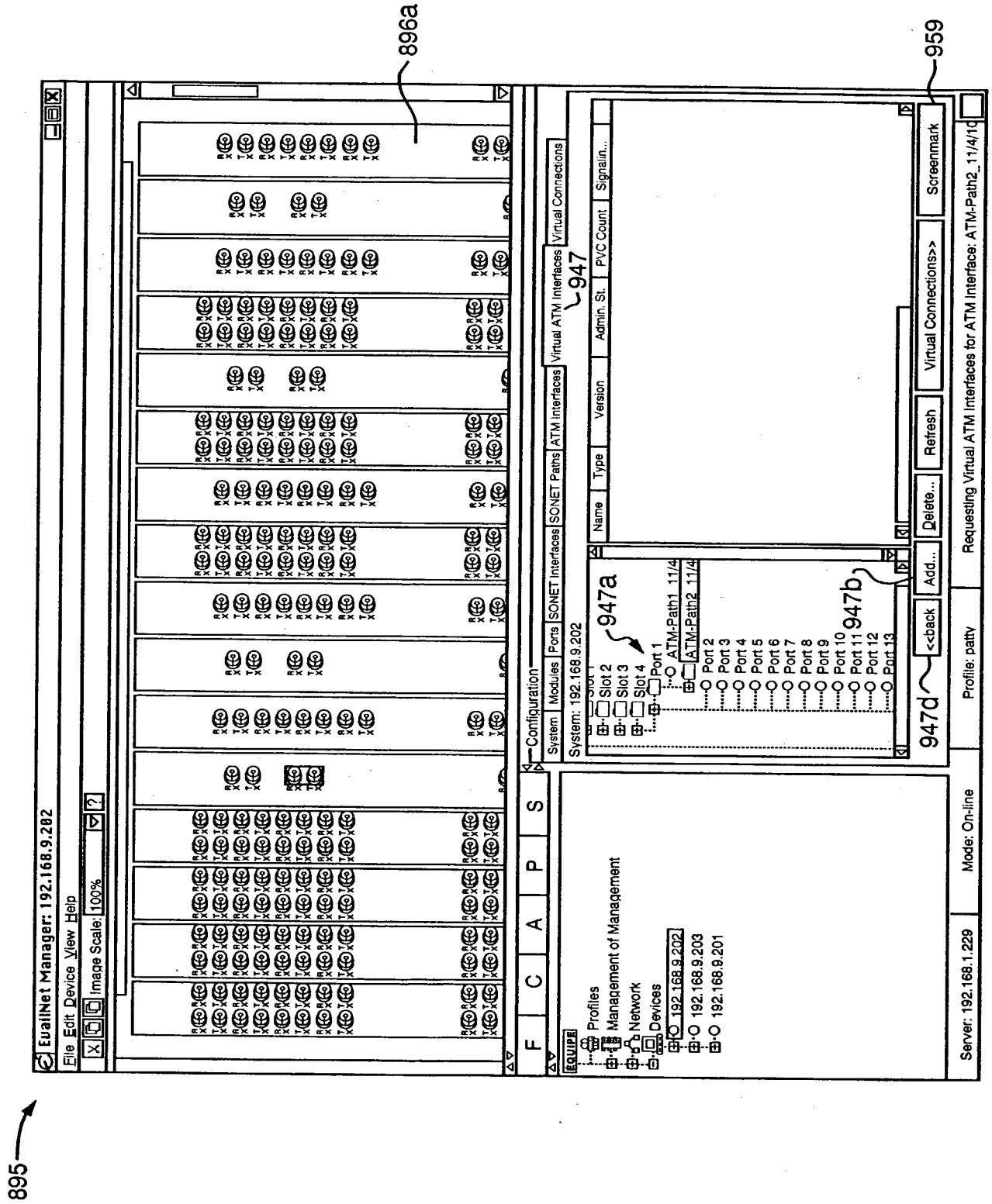

895
896a
959
947
947a
947b
947d
EqualNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Configuration
System: 192.168.9.202
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
Name Type Version Admin. St. PVC Count Signalin...
Add... Delete... Refresh Virtual Connections>> Screenmark
<<back
Slot 1
Slot 2
Slot 3
Slot 4
ATM-Path1 11/4
ATM-Path2 11/4
Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Port 10
Port 11
Port 12
Port 13
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
Requesting Virtual ATM Interfaces for ATM Interface: ATM-Path2_11/4/10

FIG. 5S

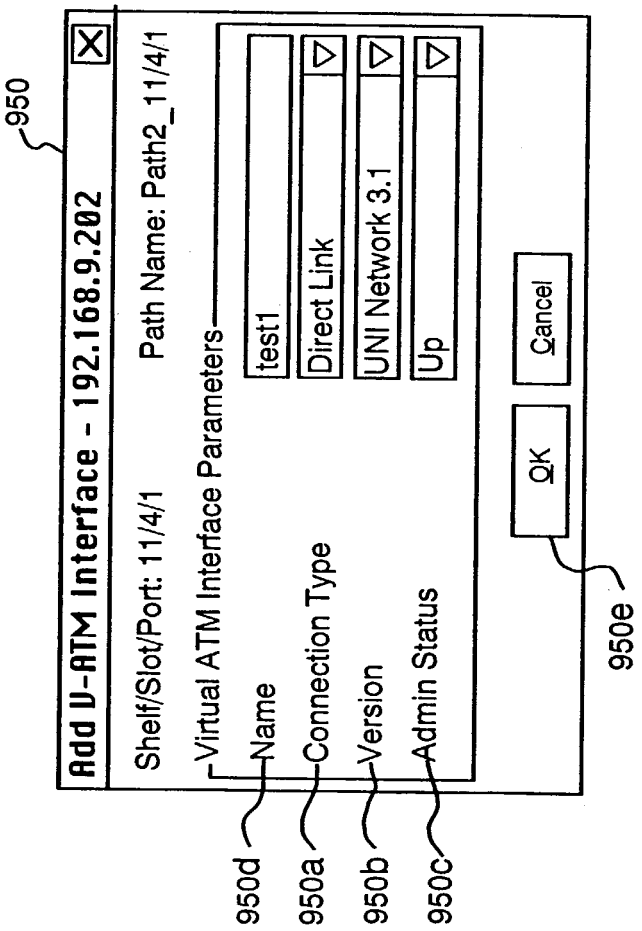

950
Add U-ATM Interface - 192.168.9.202
Shelf/Slot/Port: 11/4/1
Path Name: Path2_11/4/1
Virtual ATM Interface Parameters
Name
test1
Connection Type
Direct Link
Version
UNI Network 3.1
Admin Status
Up
OK
Cancel
950d
950a
950b
950c
950e

FIG. 5T

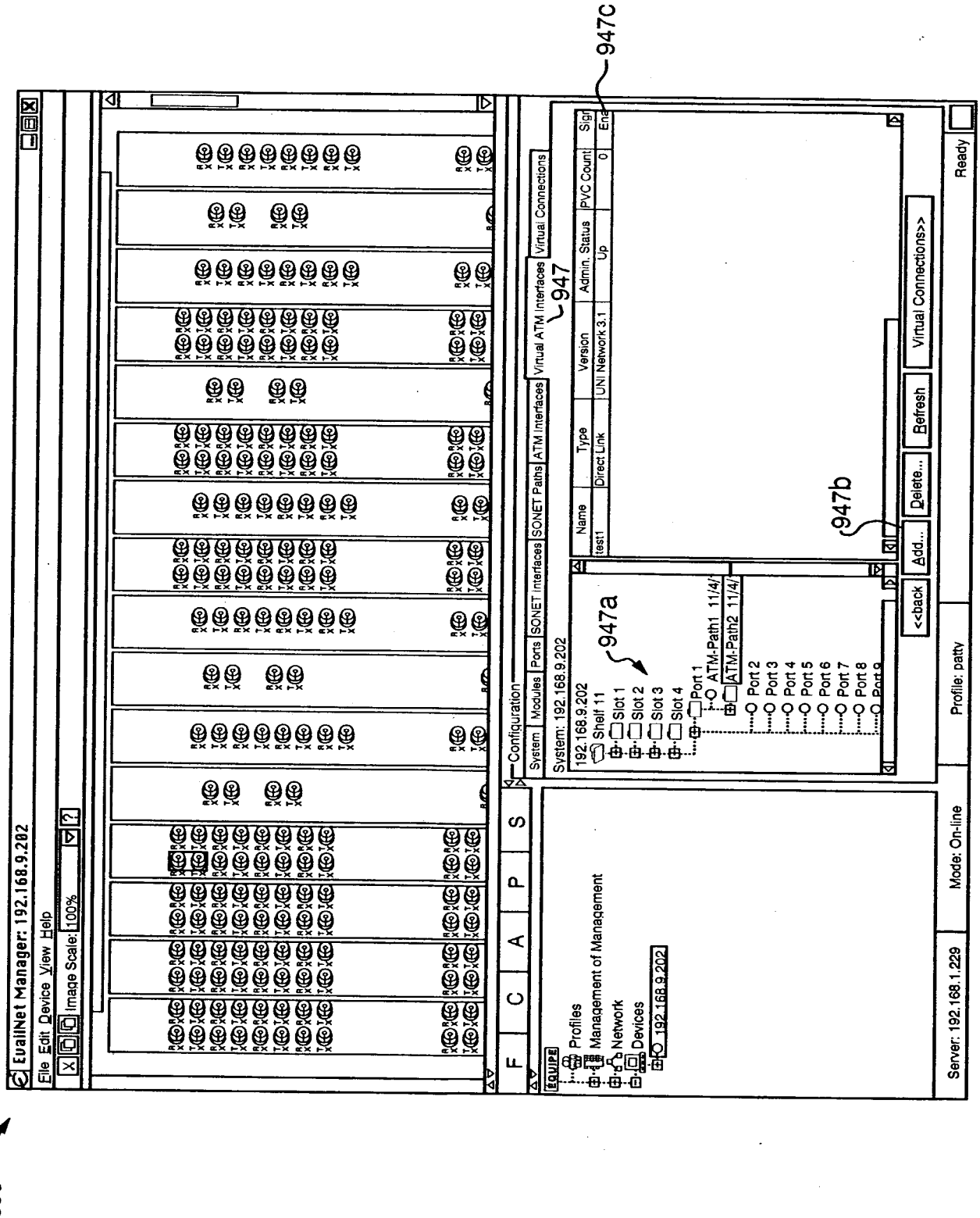

895
947c
947
947a
947b
EvaliNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
192.168.9.202
Shelf 11
Slot 1
Slot 2
Slot 3
Slot 4
Port 1
ATM-Path1 11/4/
ATM-Path2 11/4/
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Name
Type
Version
Admin. Status
PVC Count
Sig
tast1
Direct Link
UNI Network 3.1
Up
0
<<back
Add...
Delete...
Refresh
Virtual Connections>>
Ready
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty

FIG. 5U

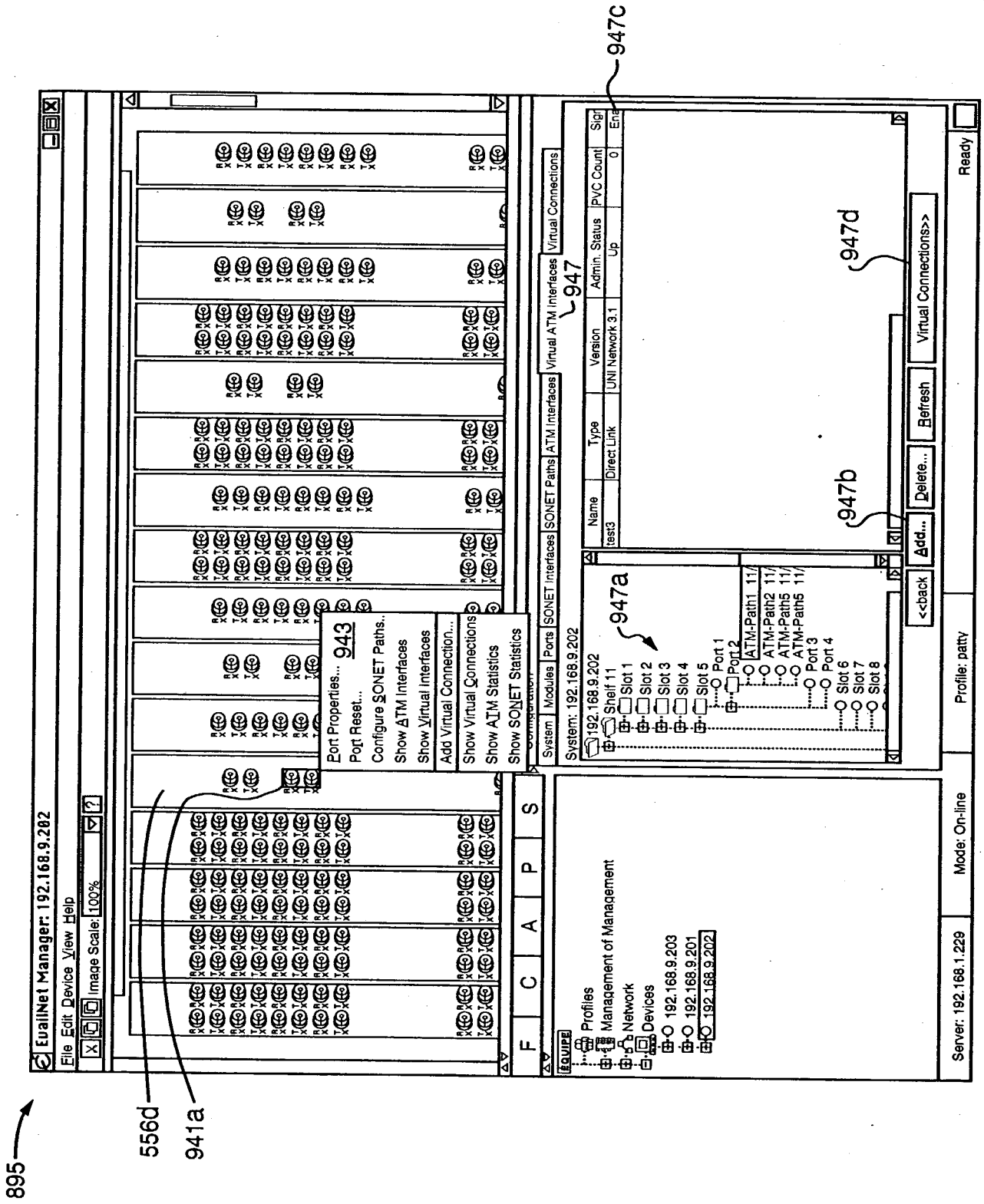

895
556d
941a
947c
947d
947b
947a
947
943
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
Port Properties...
Port Reset...
Configure SONET Paths...
Show ATM Interfaces
Show Virtual Interfaces
Add Virtual Connection...
Show Virtual Connections
Show ATM Statistics
Show SONET Statistics
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
Name
Type
Version
Admin. Status
PVC Count
test3
Direct Link
UNI Network 3.1
Up
0
System: 192.168.9.202
192.168.9.202
Shelf 11
Slot 1
Slot 2
Slot 3
Slot 4
Slot 5
Port 1
Port 2
ATM-Path1
ATM-Path2
ATM-Path5
ATM-Path5
Port 3
Port 4
Slot 6
Slot 7
Slot 8
<<back
Add...
Delete...
Refresh
Virtual Connections>>
Profiles
Management of Management Network
Devices
192.168.9.203
192.168.9.201
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5V

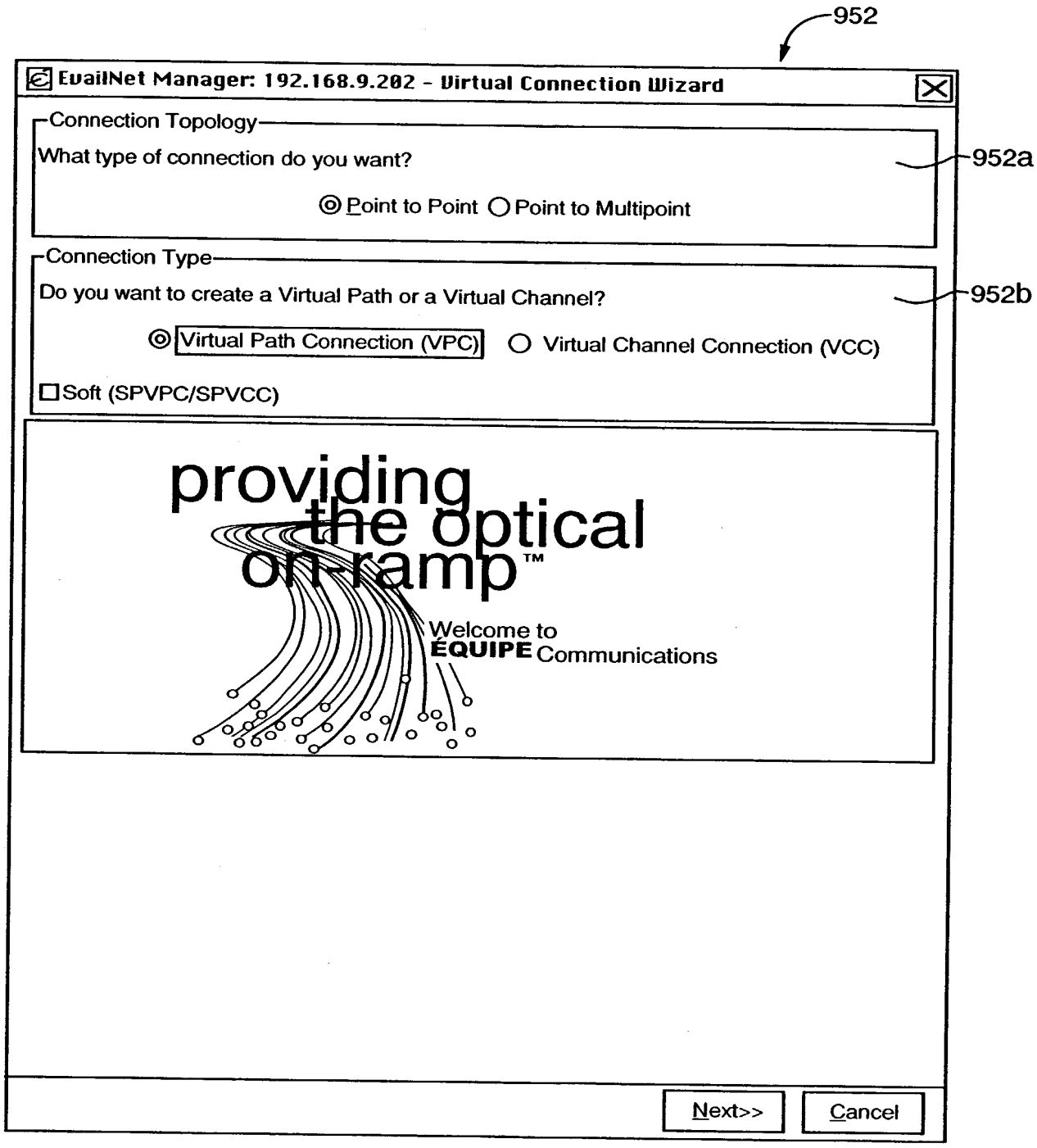

952
EvailNet Manager: 192.168.9.202 - Virtual Connection Wizard
Connection Topology
What type of connection do you want?
952a
Point to Point
Point to Multipoint
Connection Type
Do you want to create a Virtual Path or a Virtual Channel?
952b
Virtual Path Connection (VPC)
Virtual Channel Connection (VCC)
Soft (SPVPC/SPVCC)
providing the optical on-ramp™
Welcome to EQUIPE Communications
Next>>
Cancel

FIG. 5W

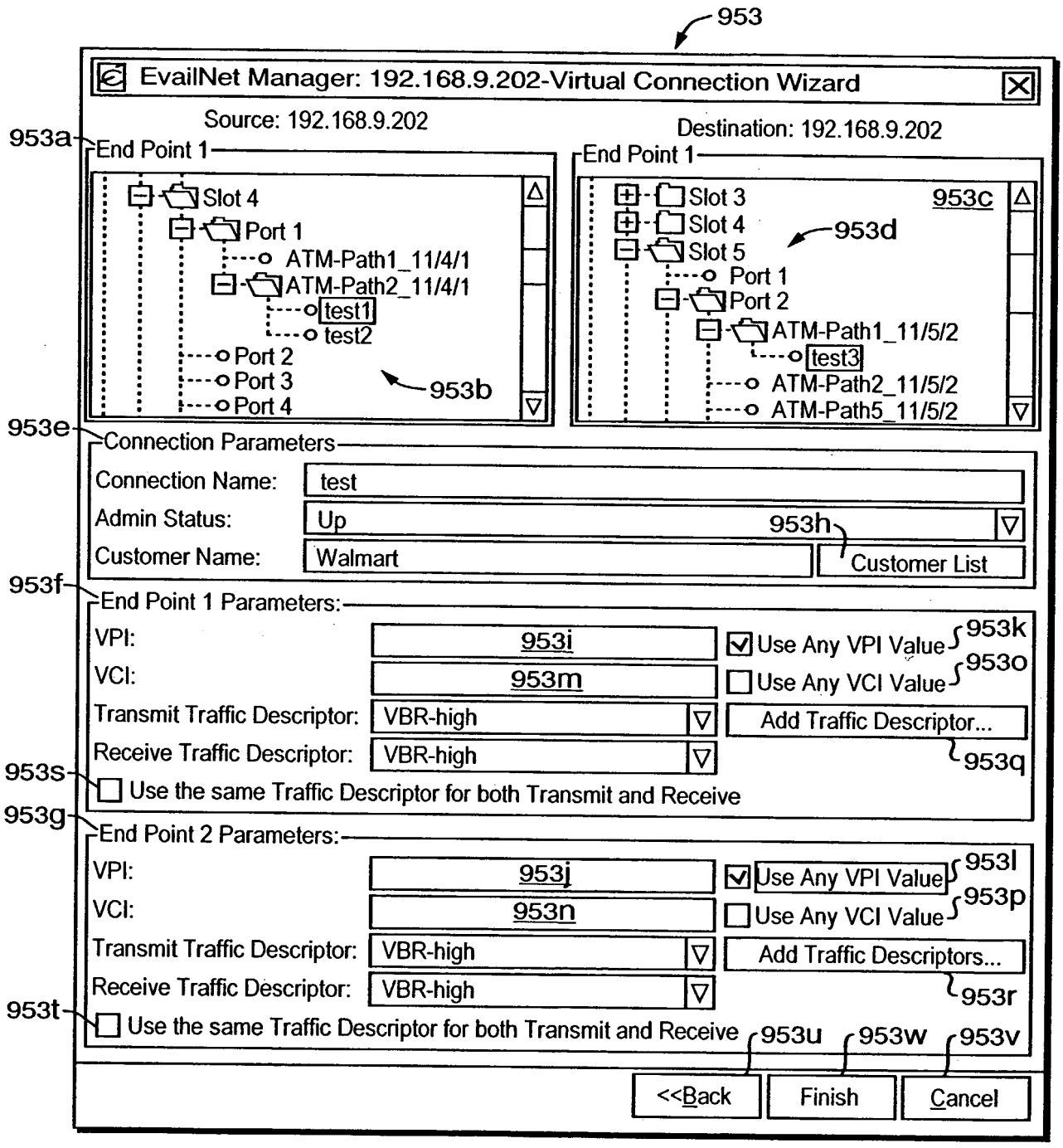

953
EvailNet Manager: 192.168.9.202-Virtual Connection Wizard
Source: 192.168.9.202
Destination: 192.168.9.202
953a
End Point 1
Slot 4
Port 1
ATM-Path1_11/4/1
ATM-Path2_11/4/1
test1
test2
Port 2
Port 3
Port 4
953b
End Point 1
Slot 3
953c
Slot 4
953d
Slot 5
Port 1
Port 2
ATM-Path1_11/5/2
test3
ATM-Path2_11/5/2
ATM-Path5_11/5/2
953e
Connection Parameters
Connection Name:
test
Admin Status:
Up
953h
Customer Name:
Walmart
Customer List
953f
End Point 1 Parameters:
VPI:
953i
Use Any VPI Value
953k
VCI:
953m
Use Any VCI Value
953o
Transmit Traffic Descriptor:
VBR-high
Add Traffic Descriptor...
Receive Traffic Descriptor:
VBR-high
953q
953s
Use the same Traffic Descriptor for both Transmit and Receive
953g
End Point 2 Parameters:
VPI:
953j
Use Any VPI Value
953l
VCI:
953n
Use Any VCI Value
953p
Transmit Traffic Descriptor:
VBR-high
Add Traffic Descriptors...
Receive Traffic Descriptor:
VBR-high
953r
953t
Use the same Traffic Descriptor for both Transmit and Receive
953u
953w
953v
<<Back
Finish
Cancel

FIG. 5X

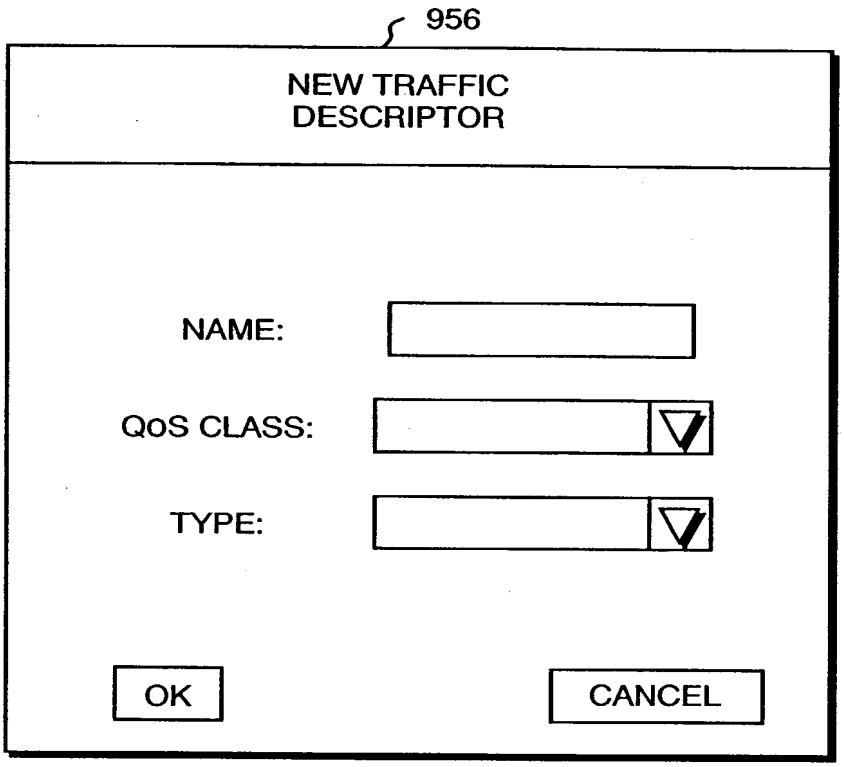


FIG. 5Y

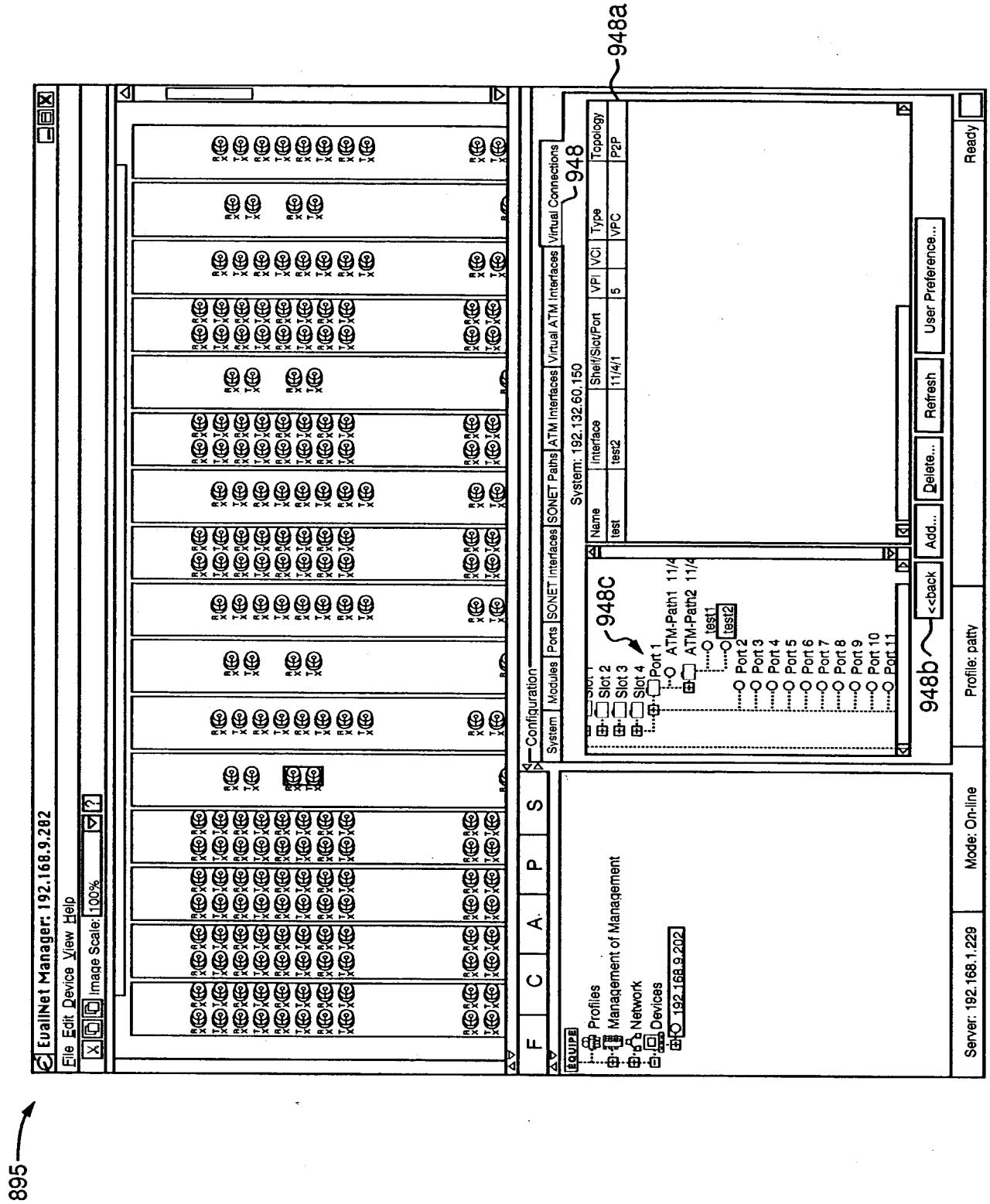

895
948a
948
948c
948b
EtailNet Manager: 192.168.9.282
File Edit Device View Help
Image Scale: 100%
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.132.60.150
Name Interface Shelf/Slot/Port VPI VCI Type Topology
test test2 11/4/1 5 VPC P2P
Add... Delete... Refresh User Preference...
<<back
Slot 1
Slot 2
Slot 3
Slot 4
Port 1
ATM-Path1 11/4
ATM-Path2 11/4
test1
test2
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Port 10
Port 11
EQUIPE
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 5Z

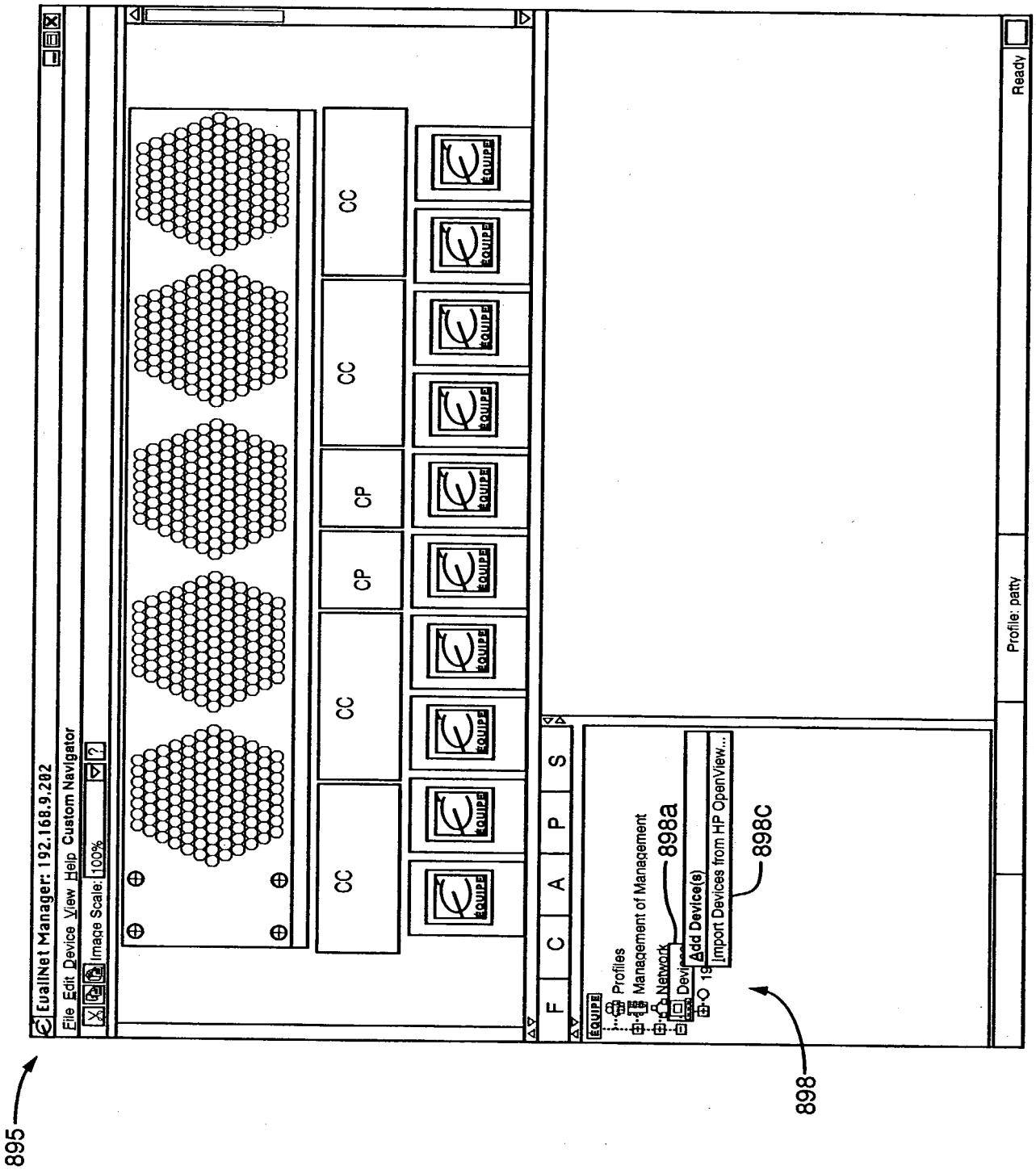

EvalNet Manager: 192.168.9.202
File Edit Device View Help Custom Navigator
Image Scale: 100%
CC
CP
EQUIPE
F C A P S
Profiles
Management of Management Network
Devices
Add Device(s)
Import Devices from HP OpenView...
898a
898c
Ready
Profile: patty
895
898

FIG. 6A

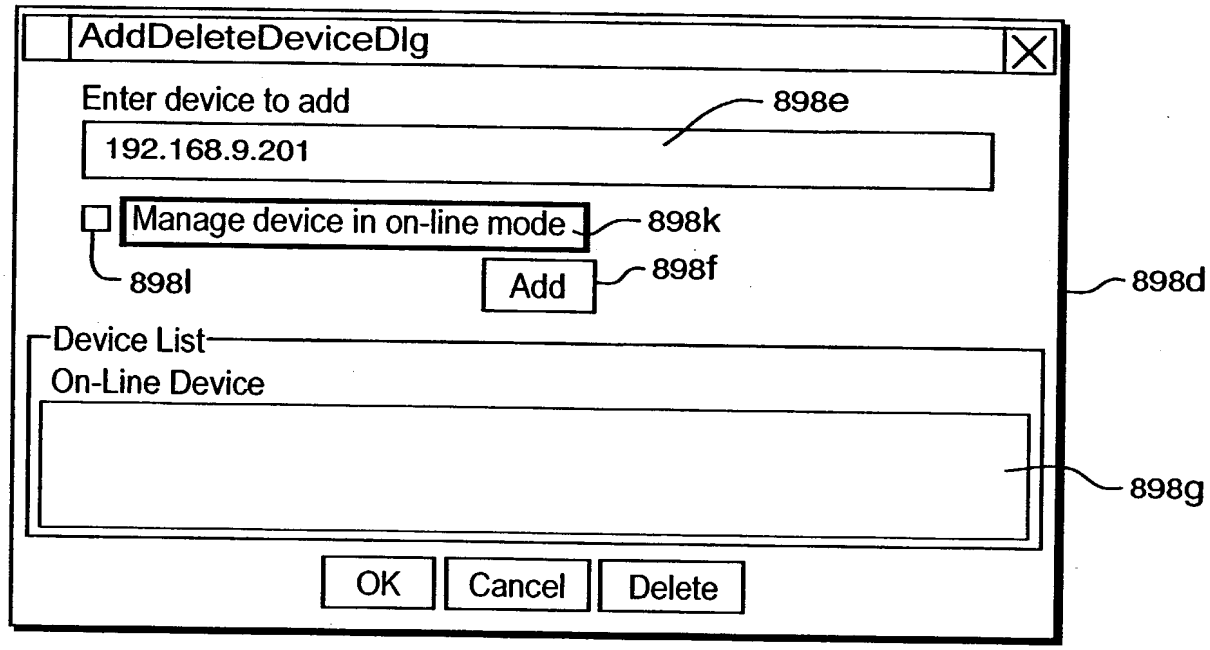

AddDeleteDeviceDlg
Enter device to add
898e
192.168.9.201
Manage device in on-line mode
898k
898l
Add
898f
898d
Device List
On-Line Device
898g
OK
Cancel
Delete

FIG. 6B

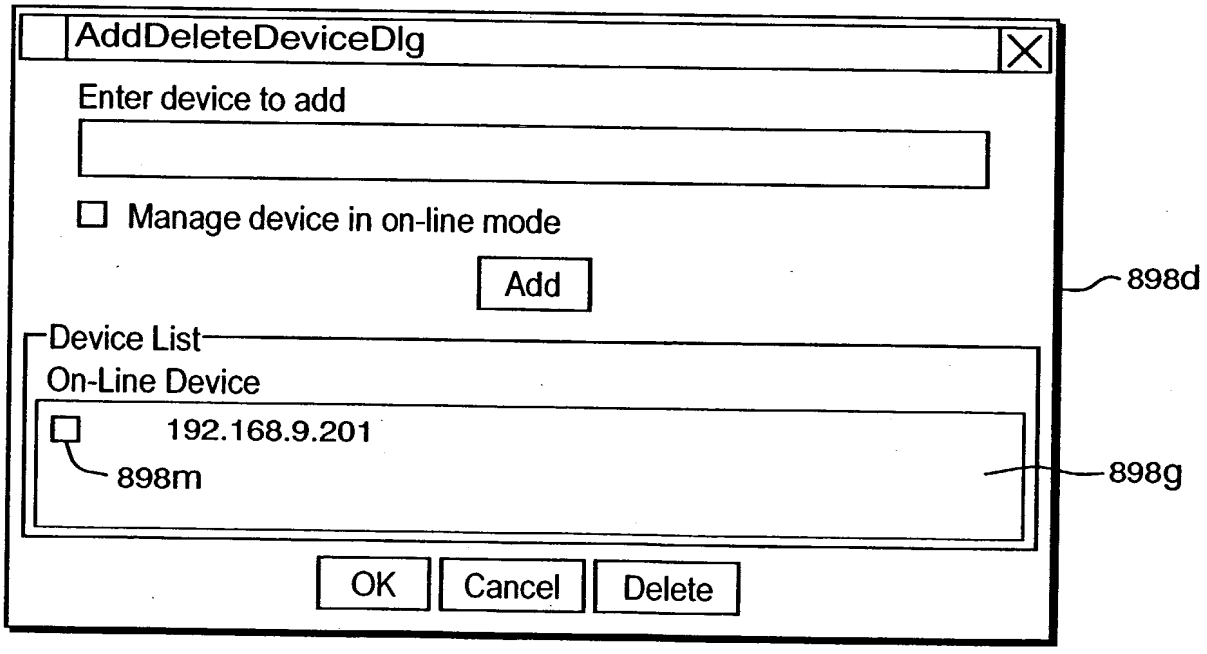

AddDeleteDeviceDlg
Enter device to add
Manage device in on-line mode
Add
898d
Device List
On-Line Device
192.168.9.201
898m
898g
OK
Cancel
Delete

FIG. 6C

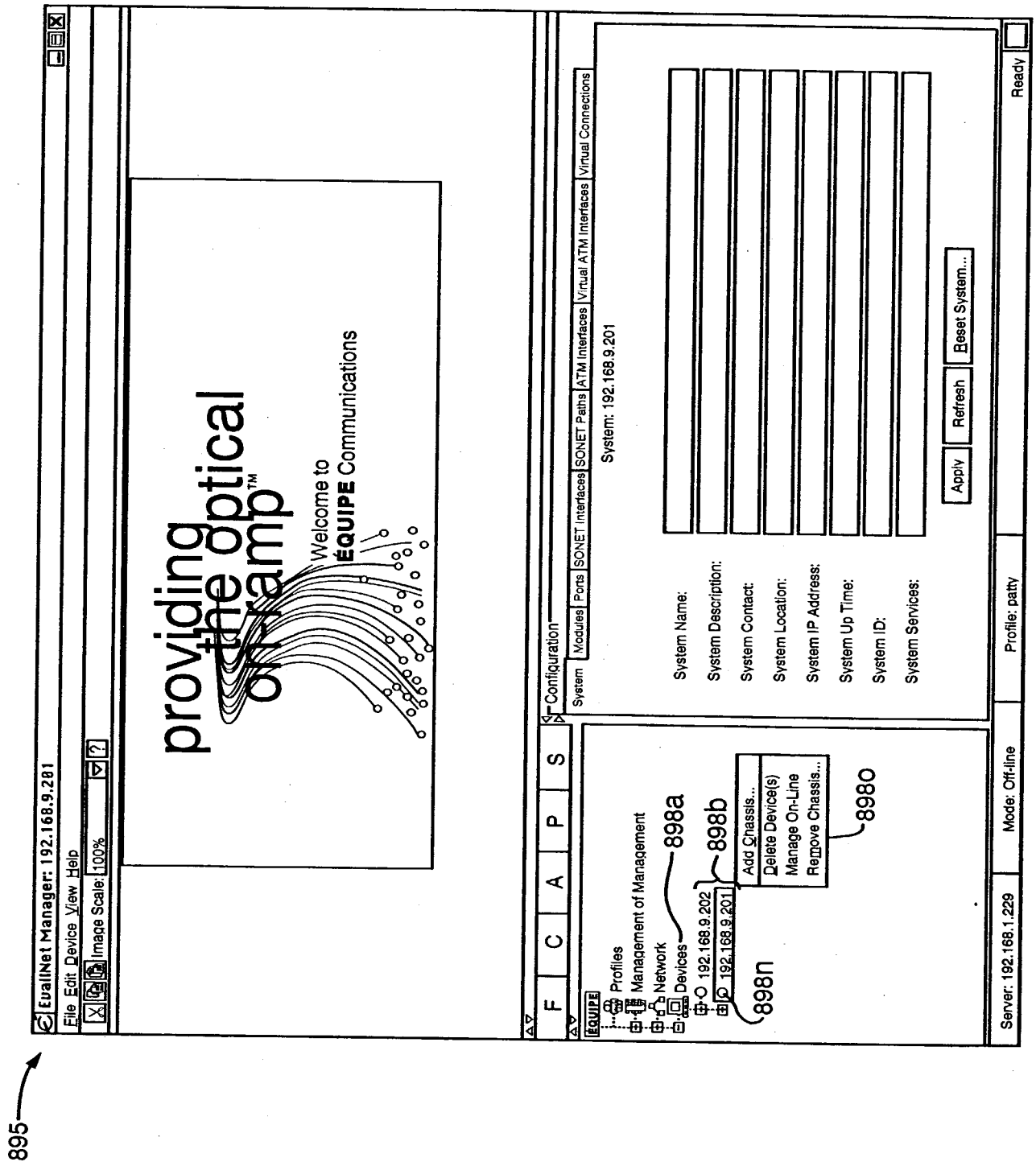

895
EvalINet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
providing the optical on-ramp™
Welcome to
EQUIPE Communications
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
898n
898a
898b
898o
Add Chassis...
Delete Device(s)
Manage On-Line
Remove Chassis...
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply
Refresh
Reset System...
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready

FIG. 6D

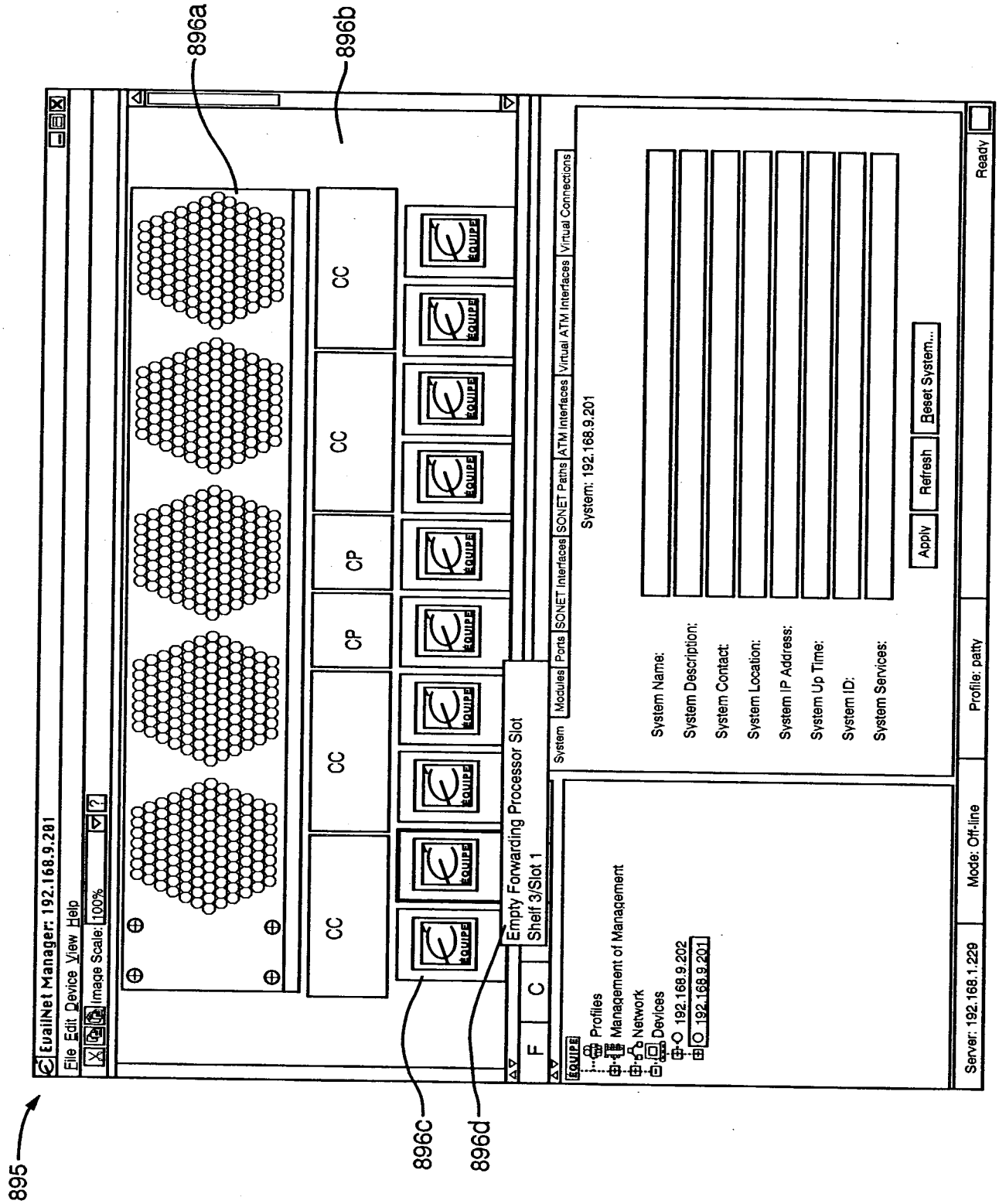

895
896a
896b
896c
896d
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
Empty Forwarding Processor Slot
Shelf 3/Slot 1
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply
Refresh
Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready

FIG. 6E

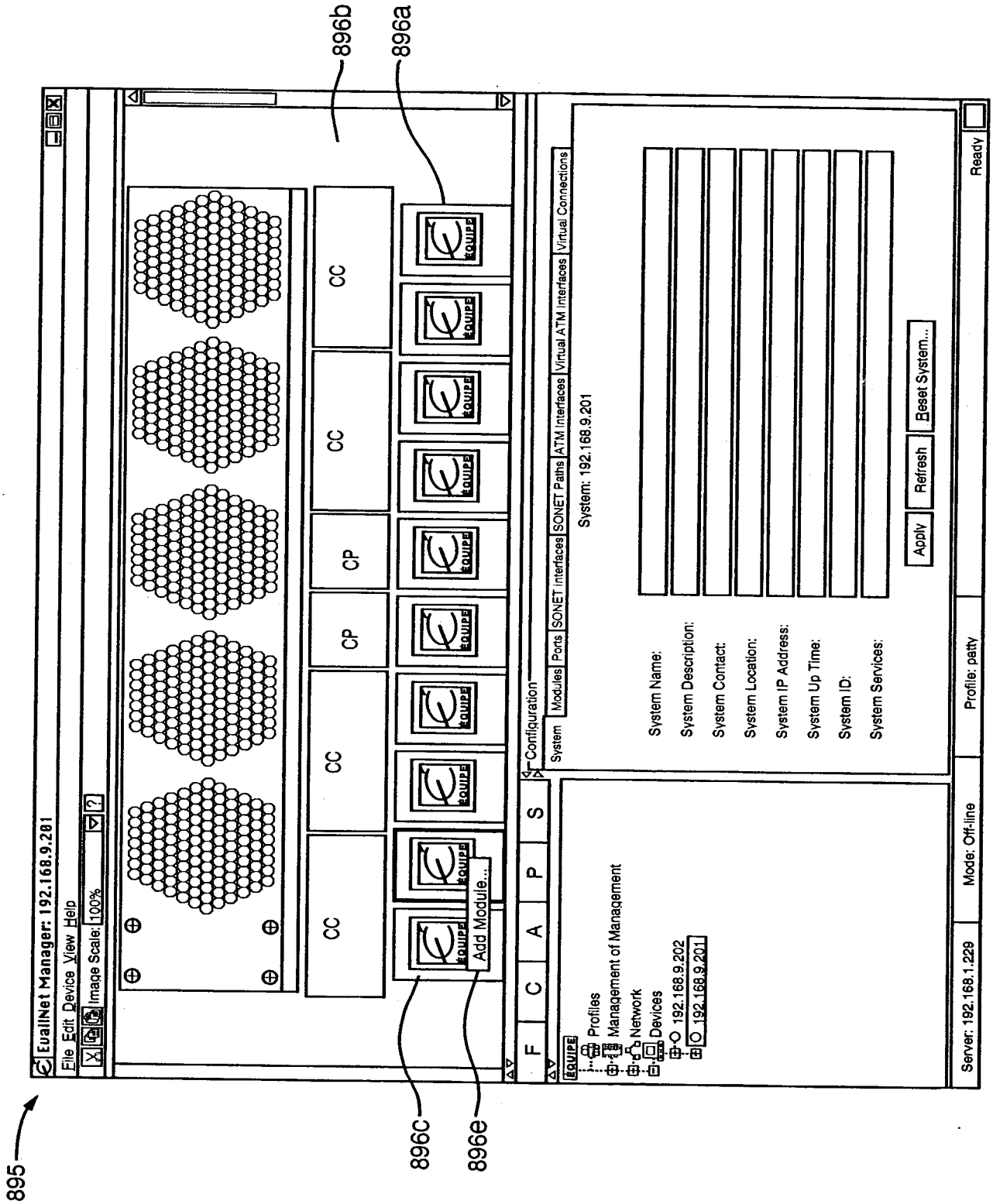

895
896b
896a
896c
896e
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
Add Module...
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Configuration
System
Modules
Ports
SONET interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply
Refresh
Reset System...
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready

FIG. 6F

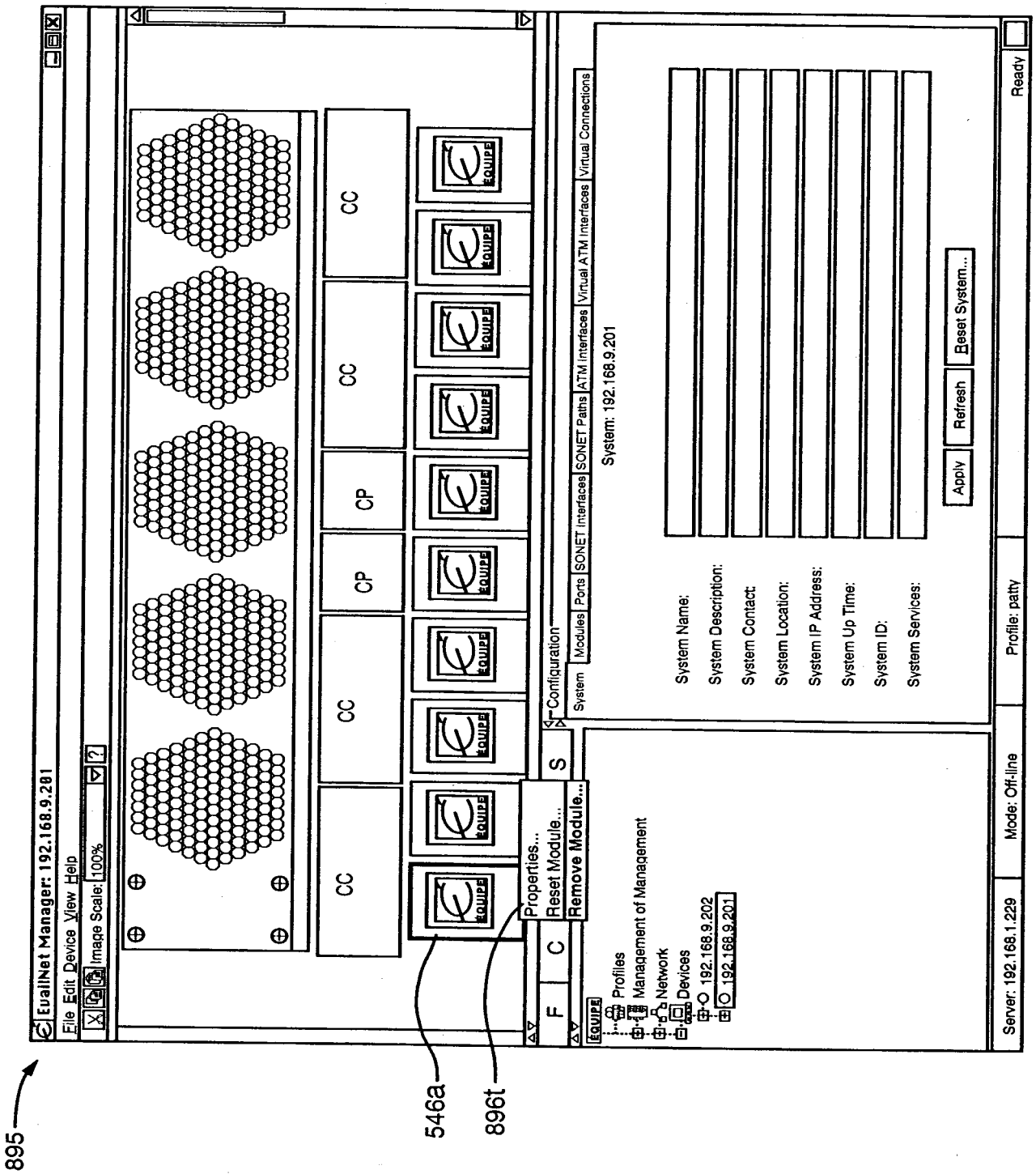

EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply
Refresh
Reset System...
F
C
S
Properties...
Reset Module...
Remove Module...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready
895
546a
896t

FIG. 6G

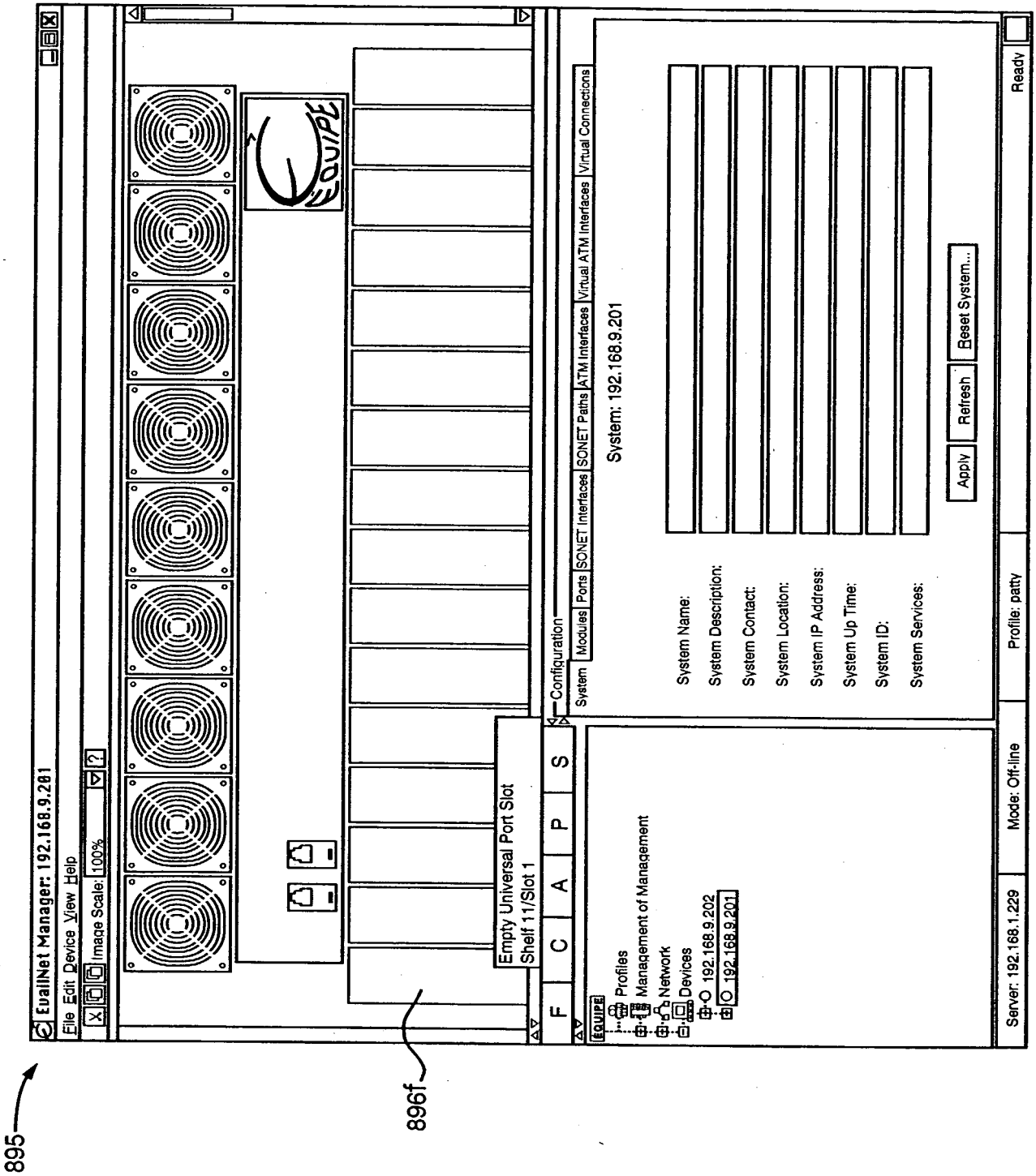

EvaliNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
Empty Universal Port Slot
Shelf 11/Slot 1
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply Refresh Reset System...
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready
895
896f

FIG. 6H

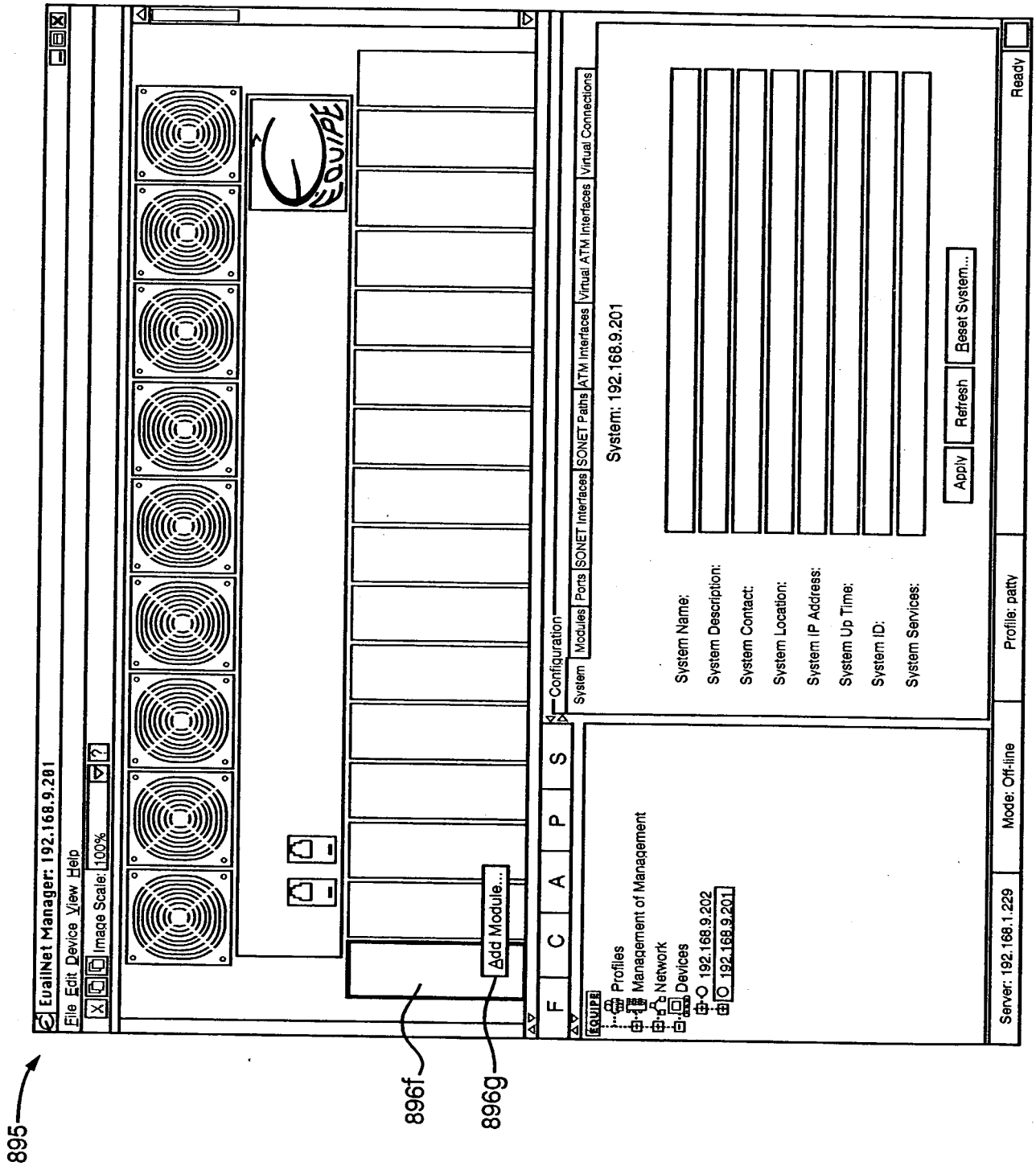

EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
Add Module...
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply Refresh Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready
895
896f
896g

FIG. 6I

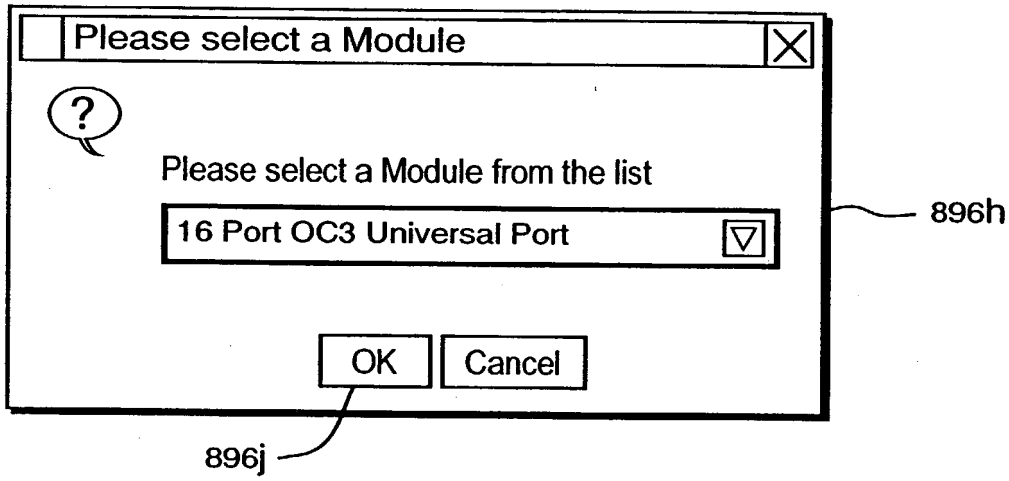

Please select a Module
Please select a Module from the list
16 Port OC3 Universal Port
OK
Cancel
896h
896j

FIG. 6J

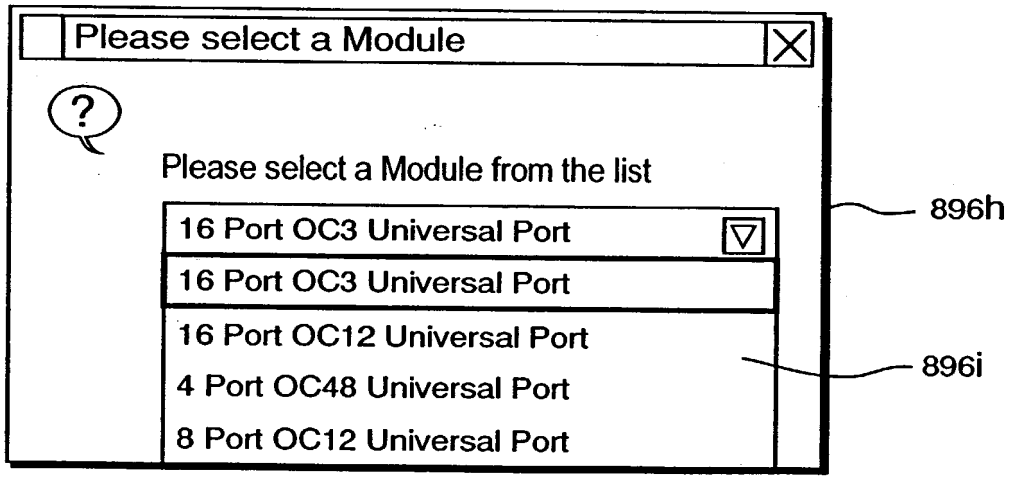

Please select a Module
Please select a Module from the list
16 Port OC3 Universal Port
16 Port OC3 Universal Port
16 Port OC12 Universal Port
4 Port OC48 Universal Port
8 Port OC12 Universal Port
896h
896i

FIG. 6K

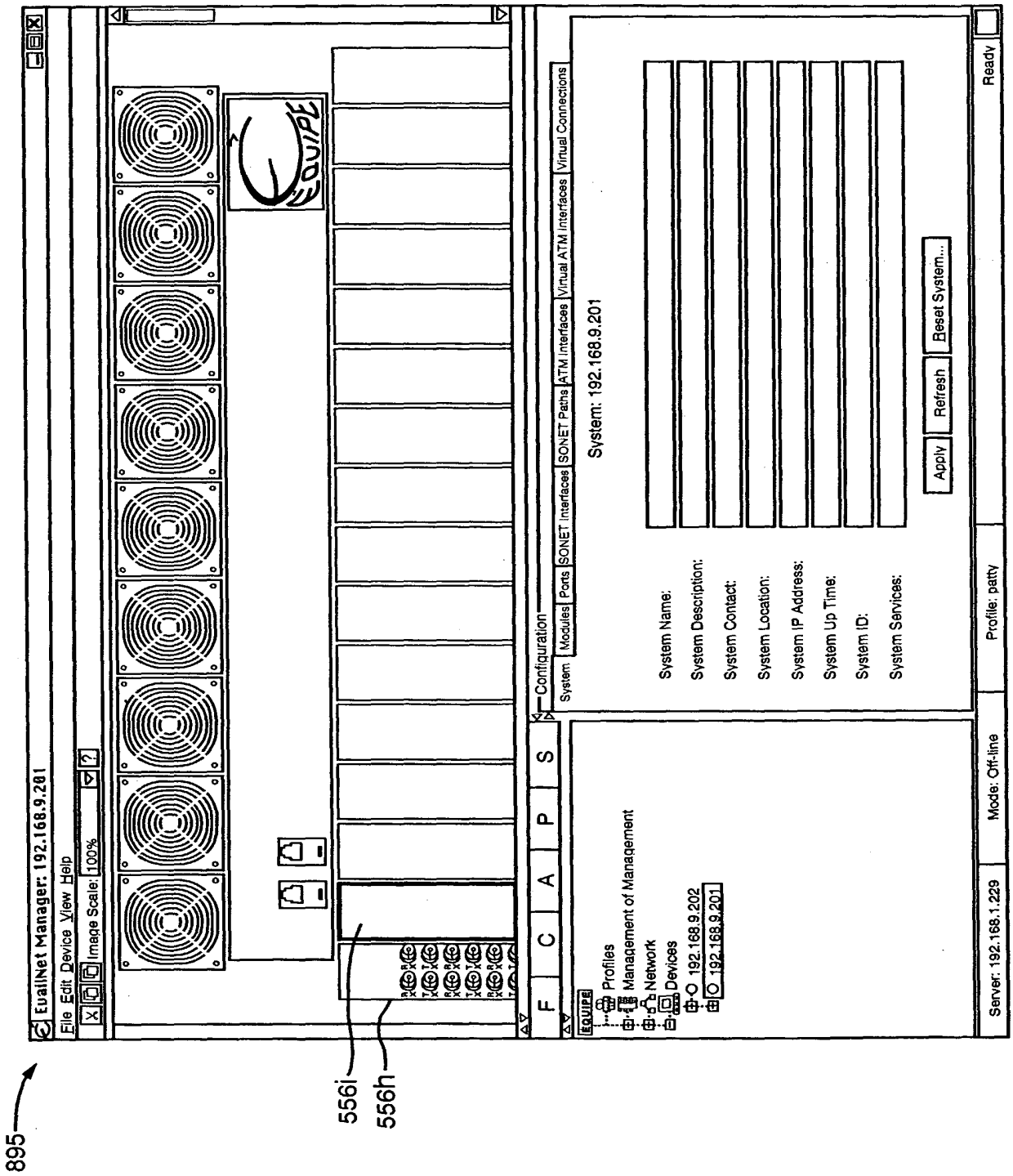

EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM interfaces Virtual ATM interfaces Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply Refresh Reset System...
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready
895
556i
556h

FIG. 6L

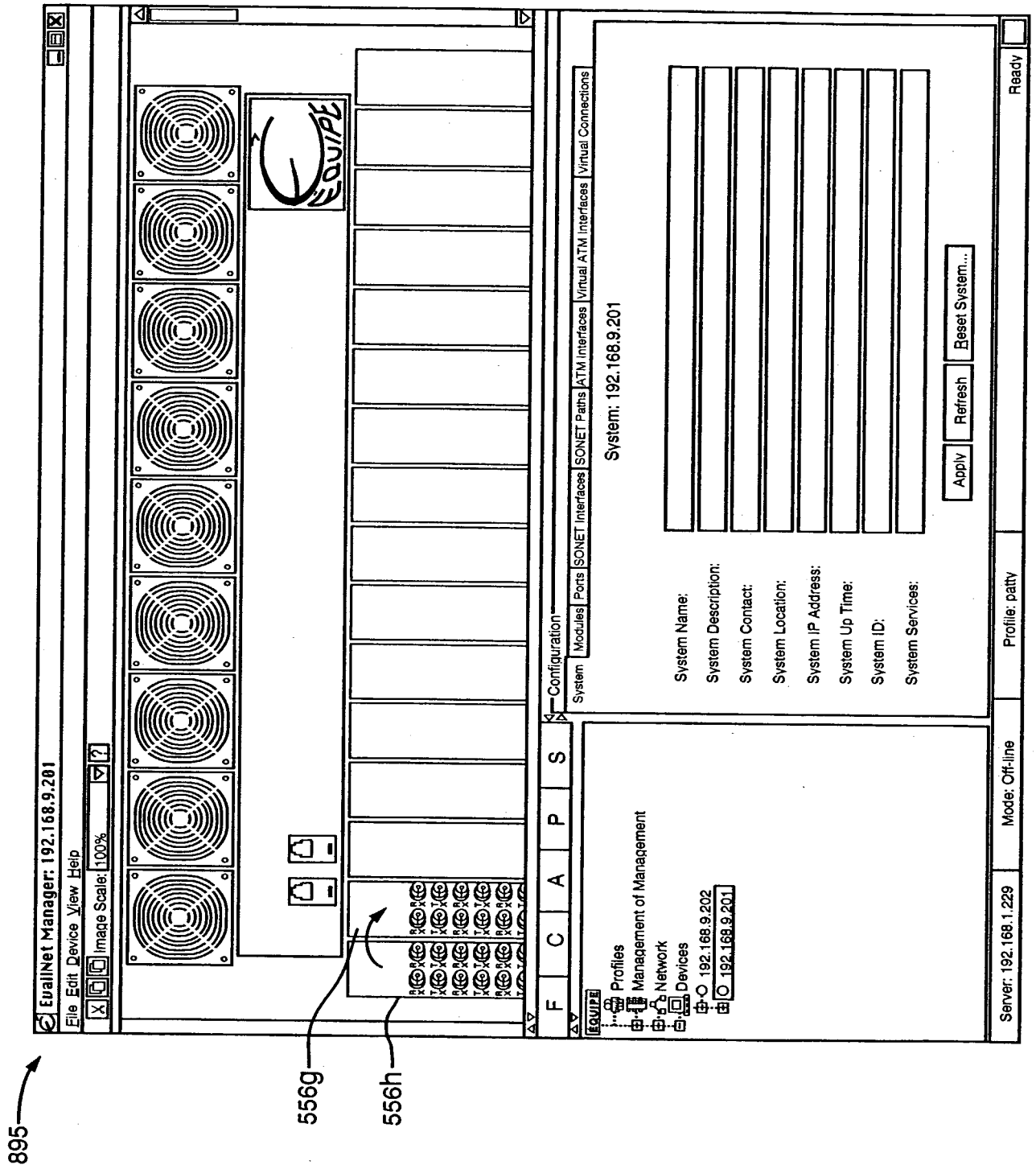

EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply
Refresh
Reset System...
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready
895
556g
556h

FIG. 6M

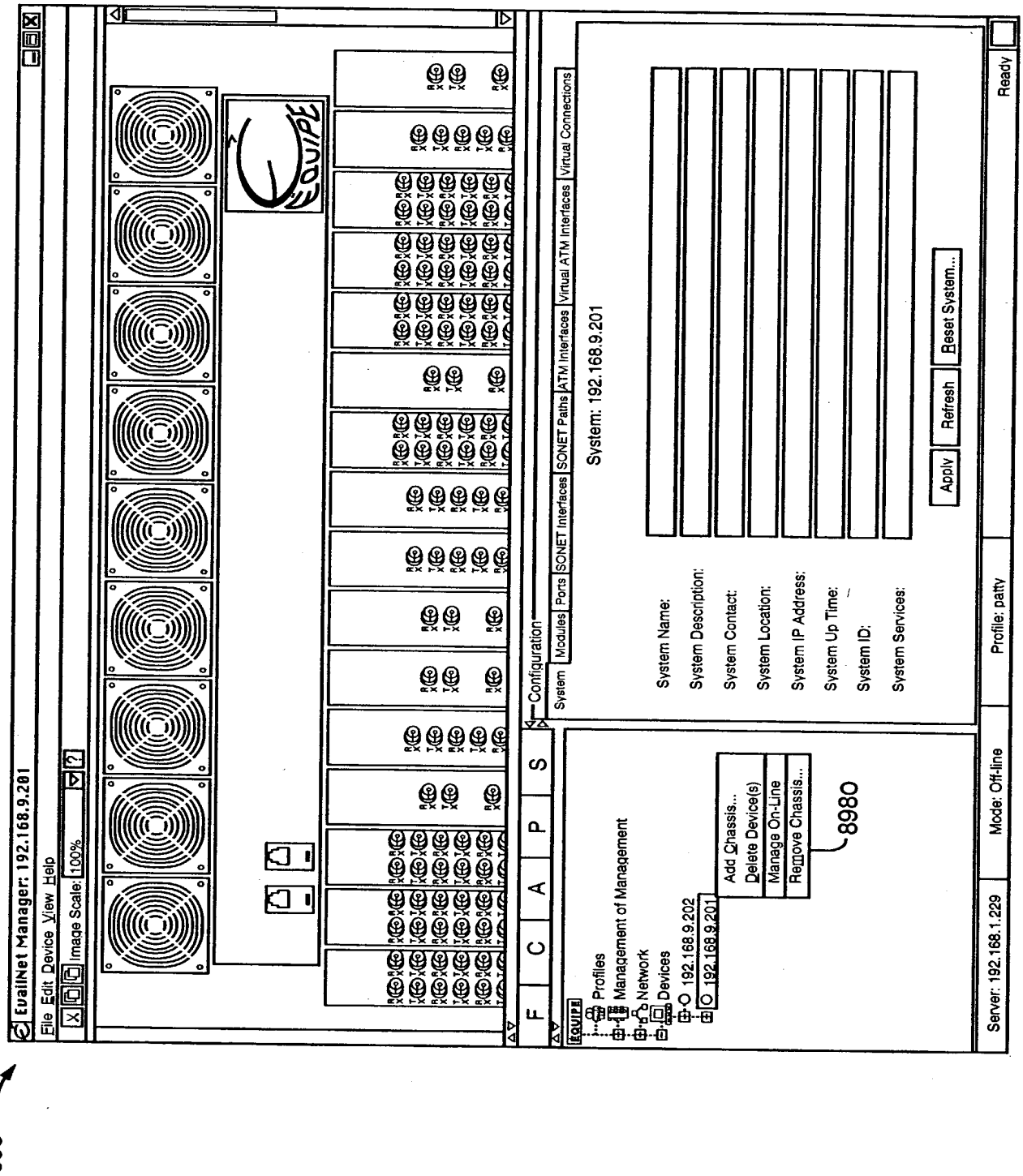

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
F C A P S
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.201
Add Chassis...
Delete Device(s)
Manage On-Line
Remove Chassis...
8980
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
Apply Refresh Reset System...
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready

FIG. 6N

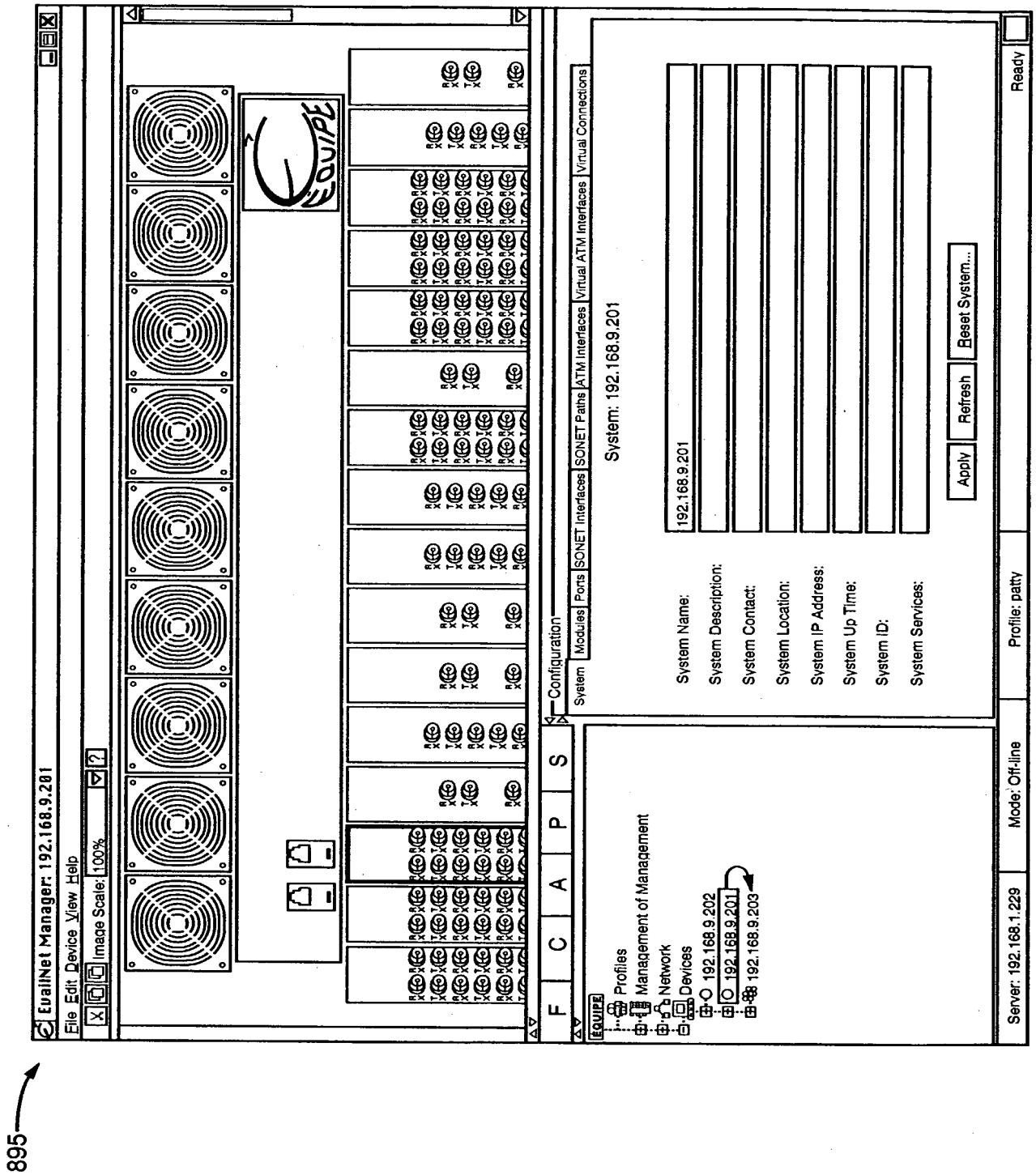

895
EvaliNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
EQUIPE
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
192.168.9.203
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
192.168.9.201
Apply
Refresh
Reset System...
Server: 192.168.1.229
Mode: Off-line
Profile: patty
Ready

FIG. 6O

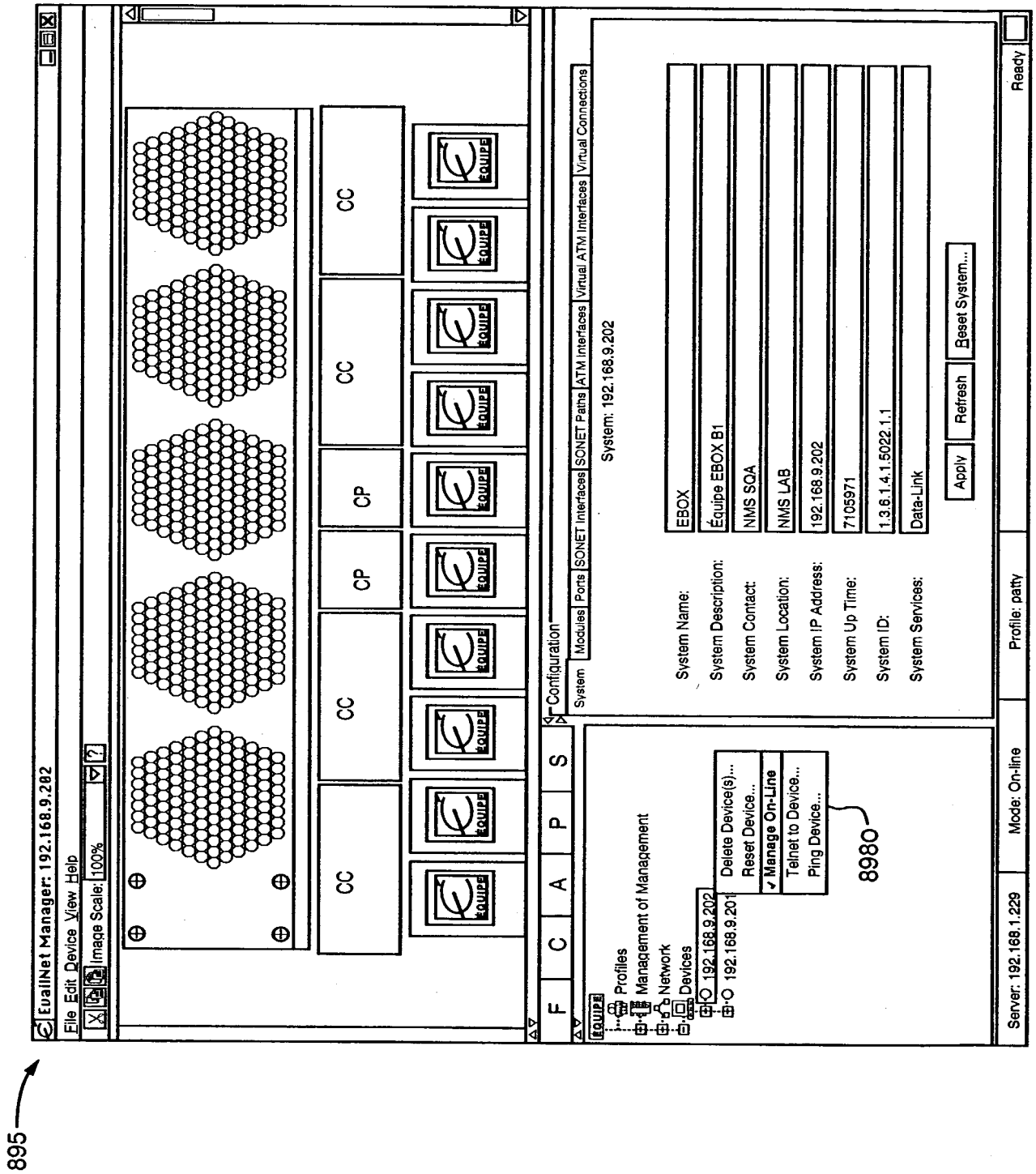

895
EvalINet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Delete Device(s)...
Reset Device...
Manage On-Line
Telnet to Device...
Ping Device...
8980
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.202
7105971
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 6P

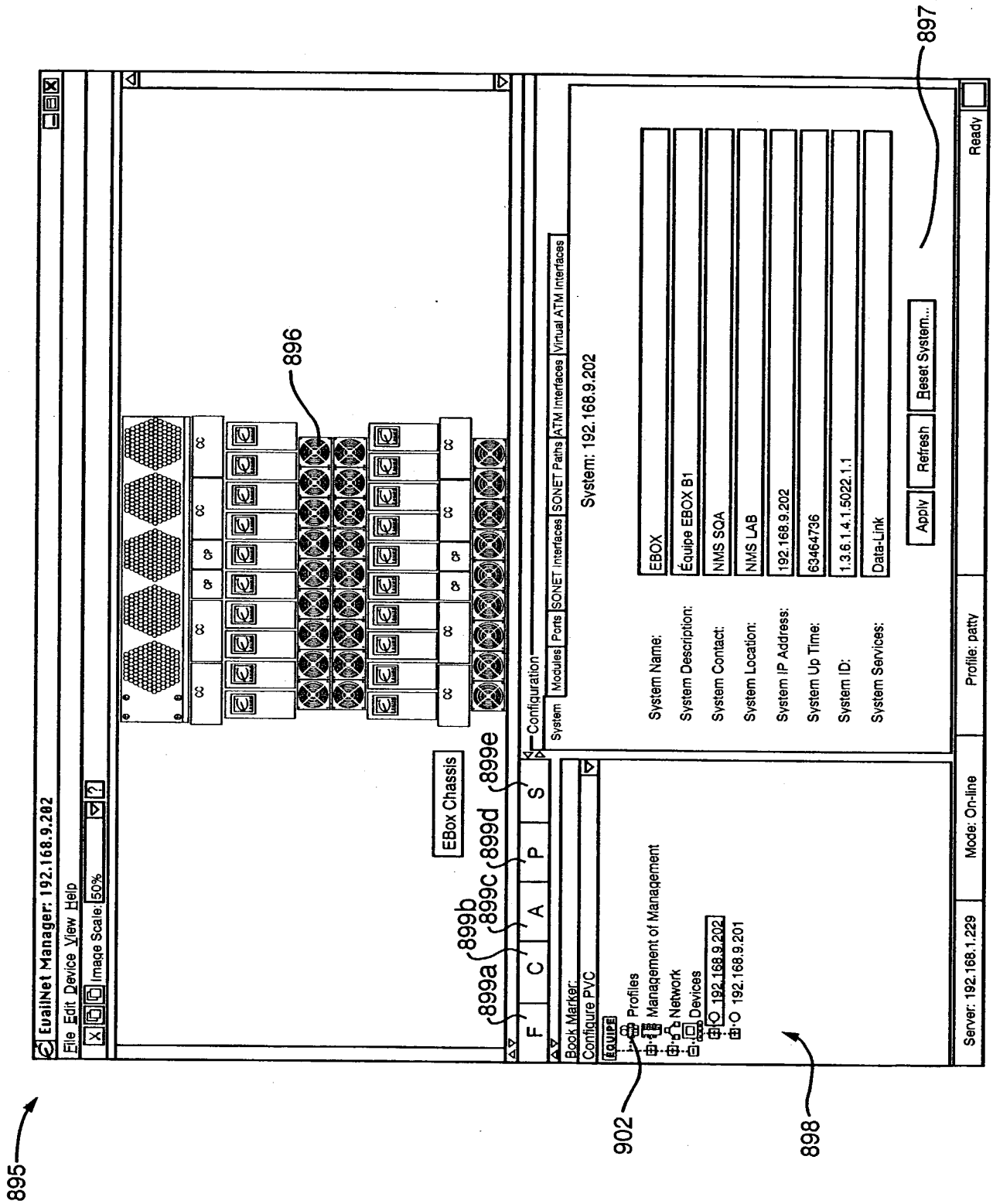

895
EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 50%
896
EBox Chassis
899a
899b
899c
899d
899e
F
C
A
P
S
Book Marker:
Configure PVC
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
902
898
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
System: 192.168.9.202
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.202
63464736
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
897
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 7A

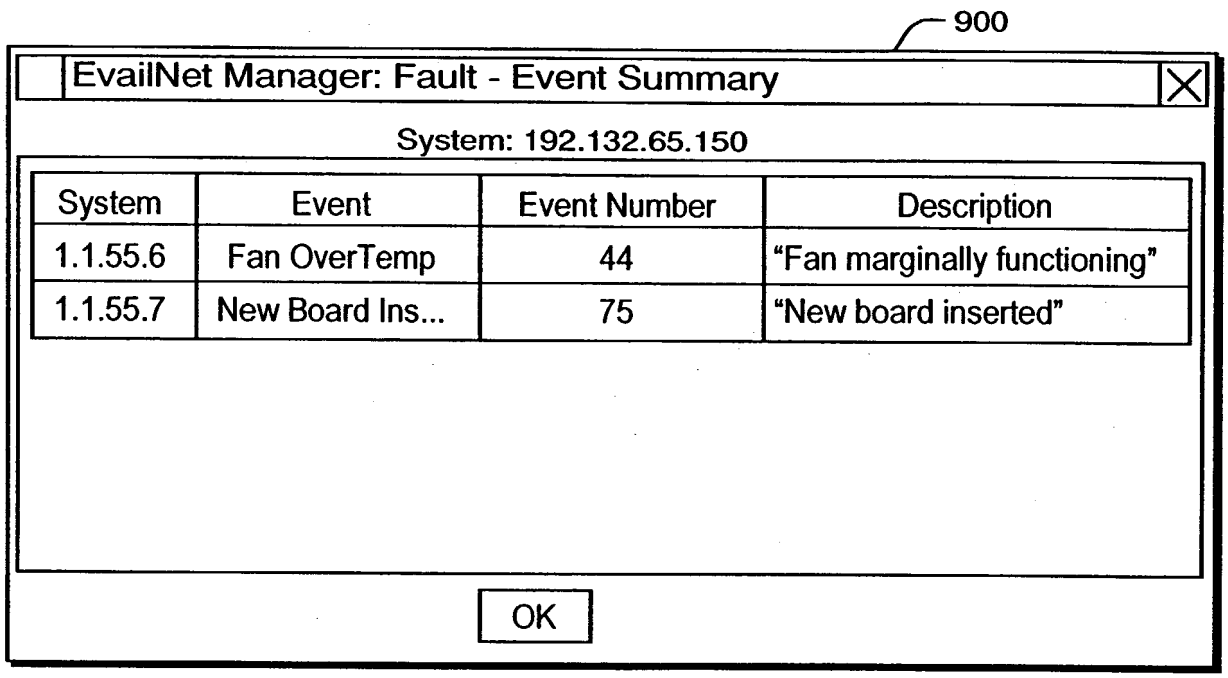

900
EvailNet Manager: Fault - Event Summary
System: 192.132.65.150
System
Event
Event Number
Description
1.1.55.6
Fan OverTemp
44
"Fan marginally functioning"
1.1.55.7
New Board Ins...
75
"New board inserted"
OK

FIG. 7B

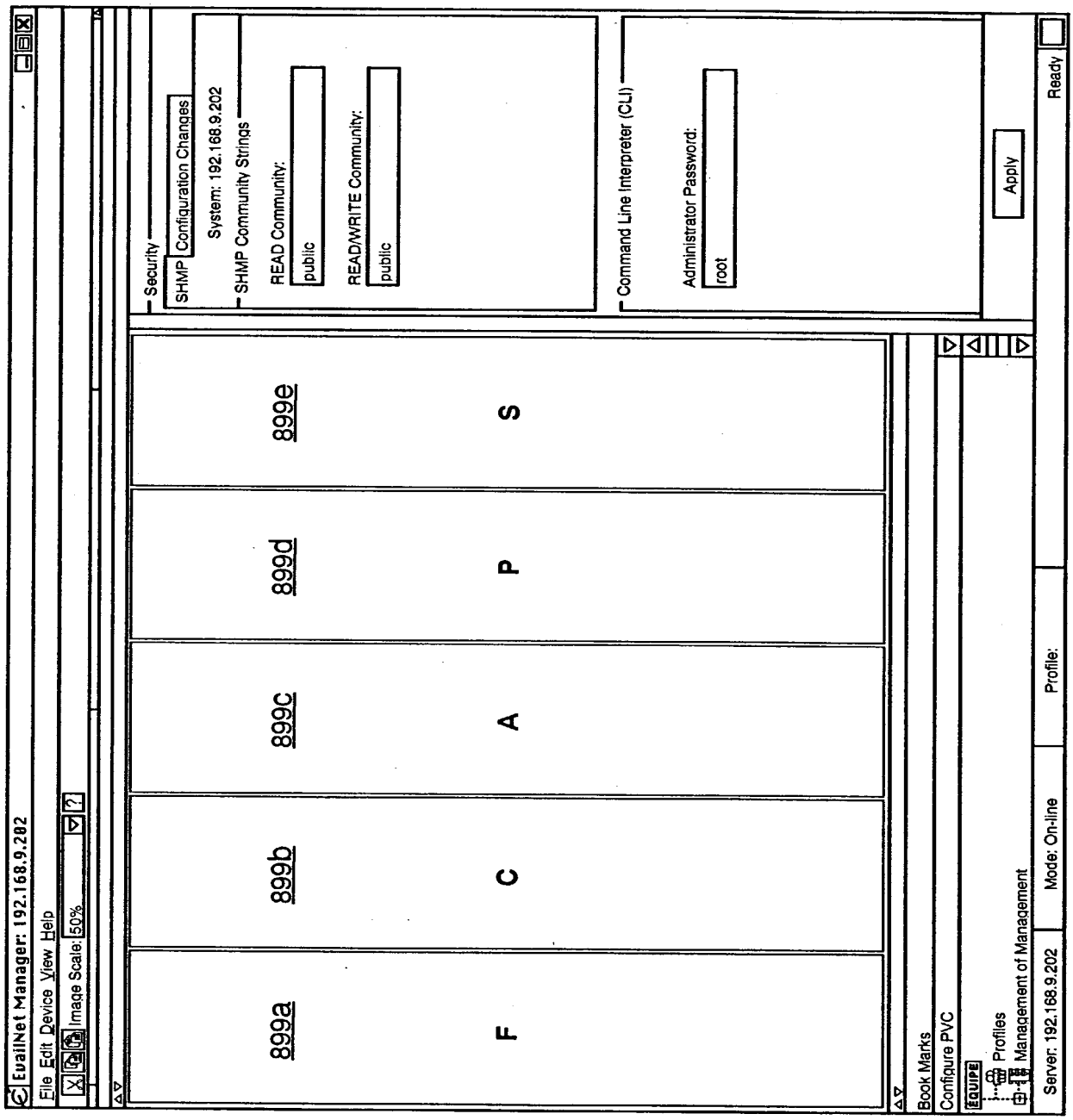

EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 50%
899a
899b
899c
899d
899e
F
C
A
P
S
Security
SHMP
Configuration Changes
System: 192.168.9.202
SHMP Community Strings
READ Community:
public
READ/WRITE Community:
public
Command Line Interpreter (CLI)
Administrator Password:
root
Apply
Book Marks
Configure PVC
EQUIPE
Profiles
Management of Management
Server: 192.168.9.202
Mode: On-line
Profile:
Ready

FIG. 7C

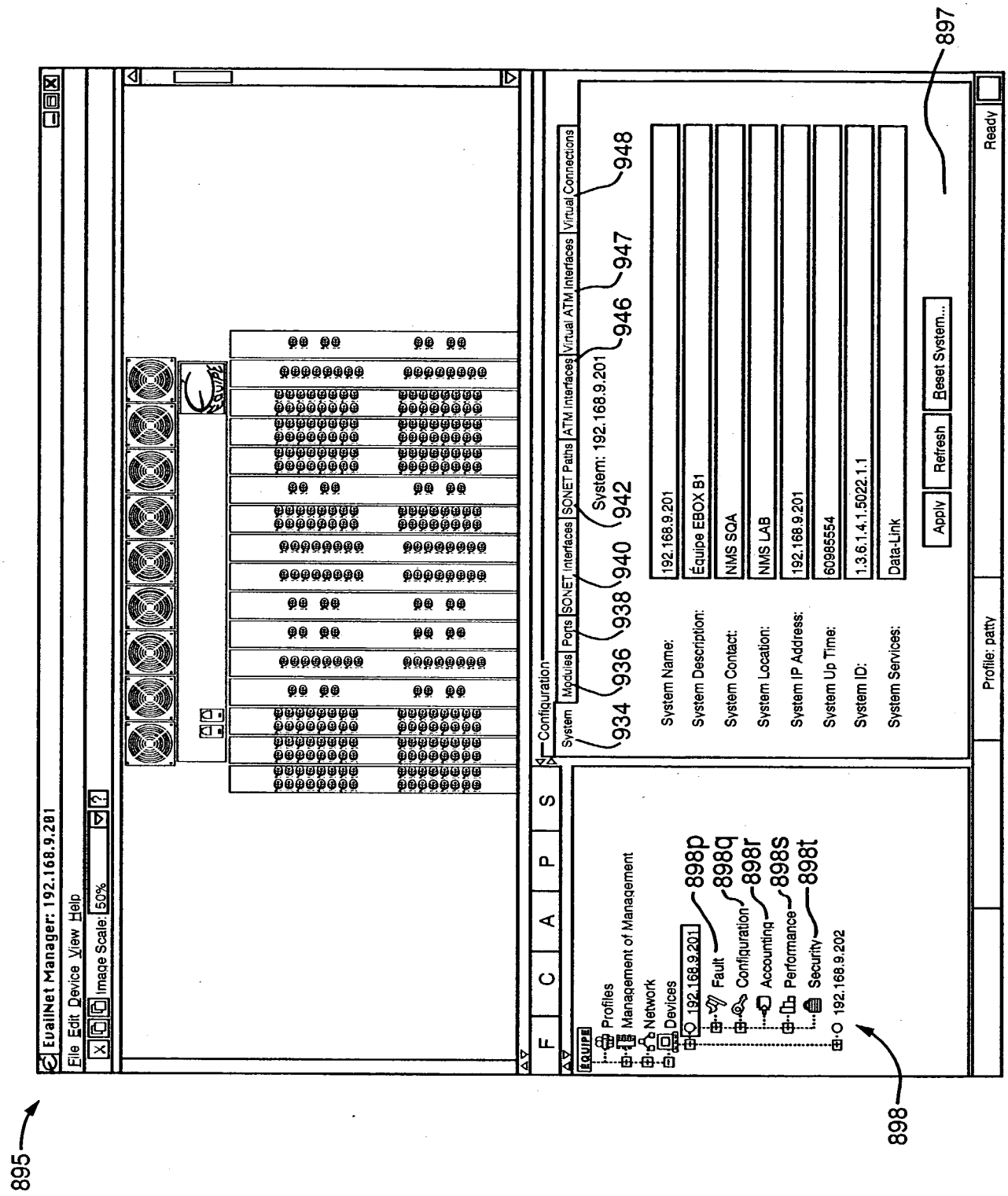

895
EvalNet Manager: 192.168.9.281
File Edit Device View Help
Image Scale: 50%
F C A P S
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
934
936
938
940
942
946
947
948
System: 192.168.9.201
System Name:
192.168.9.201
System Description:
Équipe EBOX B1
System Contact:
NMS SQA
System Location:
NMS LAB
System IP Address:
192.168.9.201
System Up Time:
60985554
System ID:
1.3.6.1.4.1.5022.1.1
System Services:
Data-Link
Apply
Refresh
Reset System...
897
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
192.168.9.202
898p
898q
898r
898s
898t
898

FIG. 7D

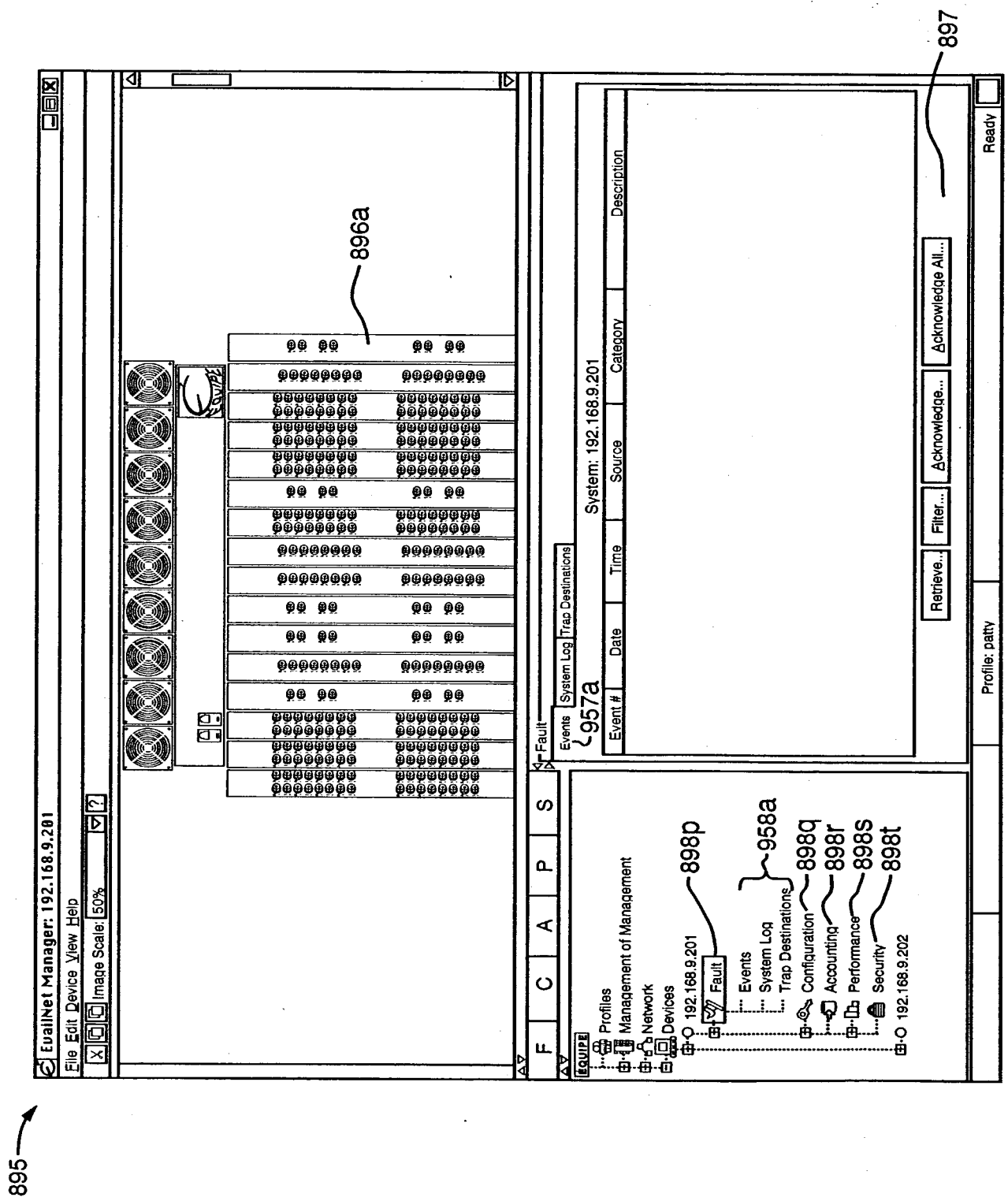

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
EQUIPE
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
898p
Events
System Log
Trap Destinations
958a
Configuration
898q
Accounting
898r
Performance
898s
Security
898t
192.168.9.202
Fault
Events
System Log
Trap Destinations
957a
System: 192.168.9.201
Event #
Date
Time
Source
Category
Description
897
Retrieve...
Filter...
Acknowledge...
Acknowledge All...
Profile: patty
Ready

FIG. 7E

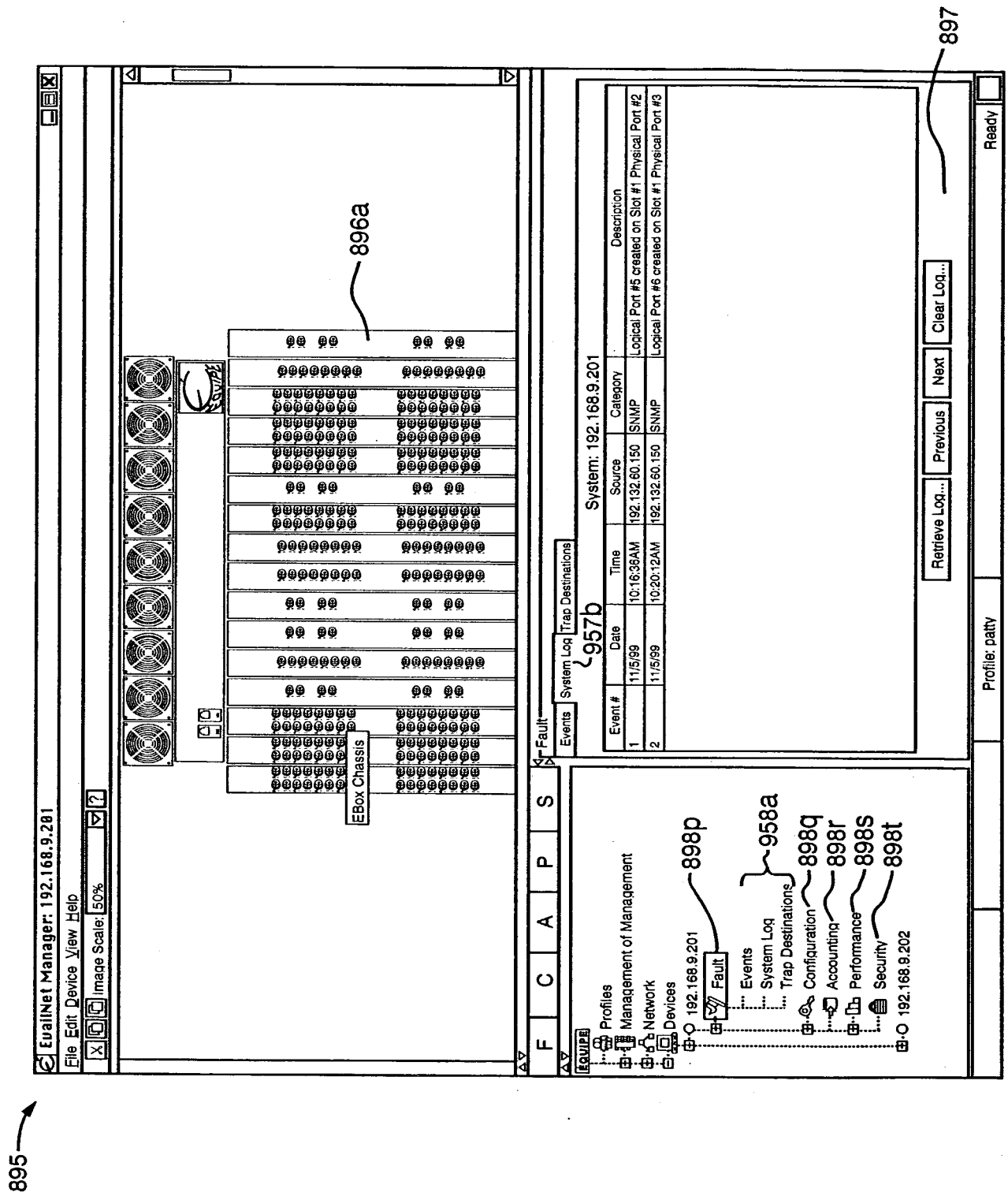

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
EBox Chassis
F C A P S
Fault
Events
System Log
Trap Destinations
957b
System: 192.168.9.201
Event # | Date | Time | Source | Category | Description
1 | 11/5/99 | 10:16:36AM | 192.132.60.150 | SNMP | Logical Port #5 created on Slot #1 Physical Port #2
2 | 11/5/99 | 10:20:12AM | 192.132.60.150 | SNMP | Logical Port #6 created on Slot #1 Physical Port #3
Retrieve Log...
Previous
Next
Clear Log...
897
Profile: patty
Ready
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Events
System Log
Trap Destinations
Configuration
Accounting
Performance
Security
192.168.9.202
898p
958a
898q
898r
898s
898t

FIG. 7F

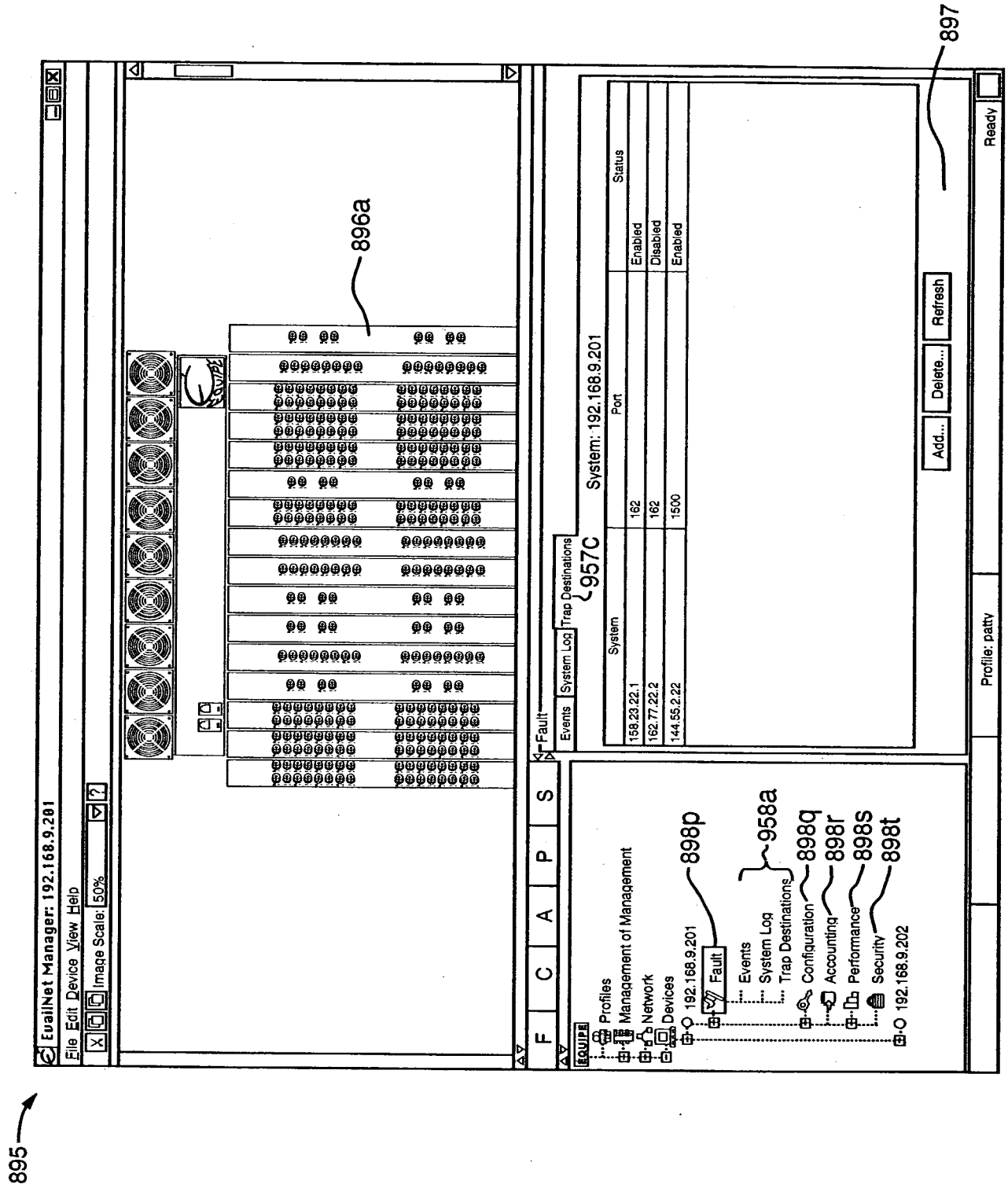

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
F C A P S
Fault
Events
System Log
Trap Destinations
957C
System: 192.168.9.201
System
Port
Status
158.23.22.1
162
Enabled
162.77.22.2
162
Disabled
144.55.2.22
1500
Enabled
Add...
Delete...
Refresh
Ready
Profile: patty
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Events
System Log
Trap Destinations
Configuration
Accounting
Performance
Security
192.168.9.202
898p
958a
898q
898r
898s
898t

FIG. 7G

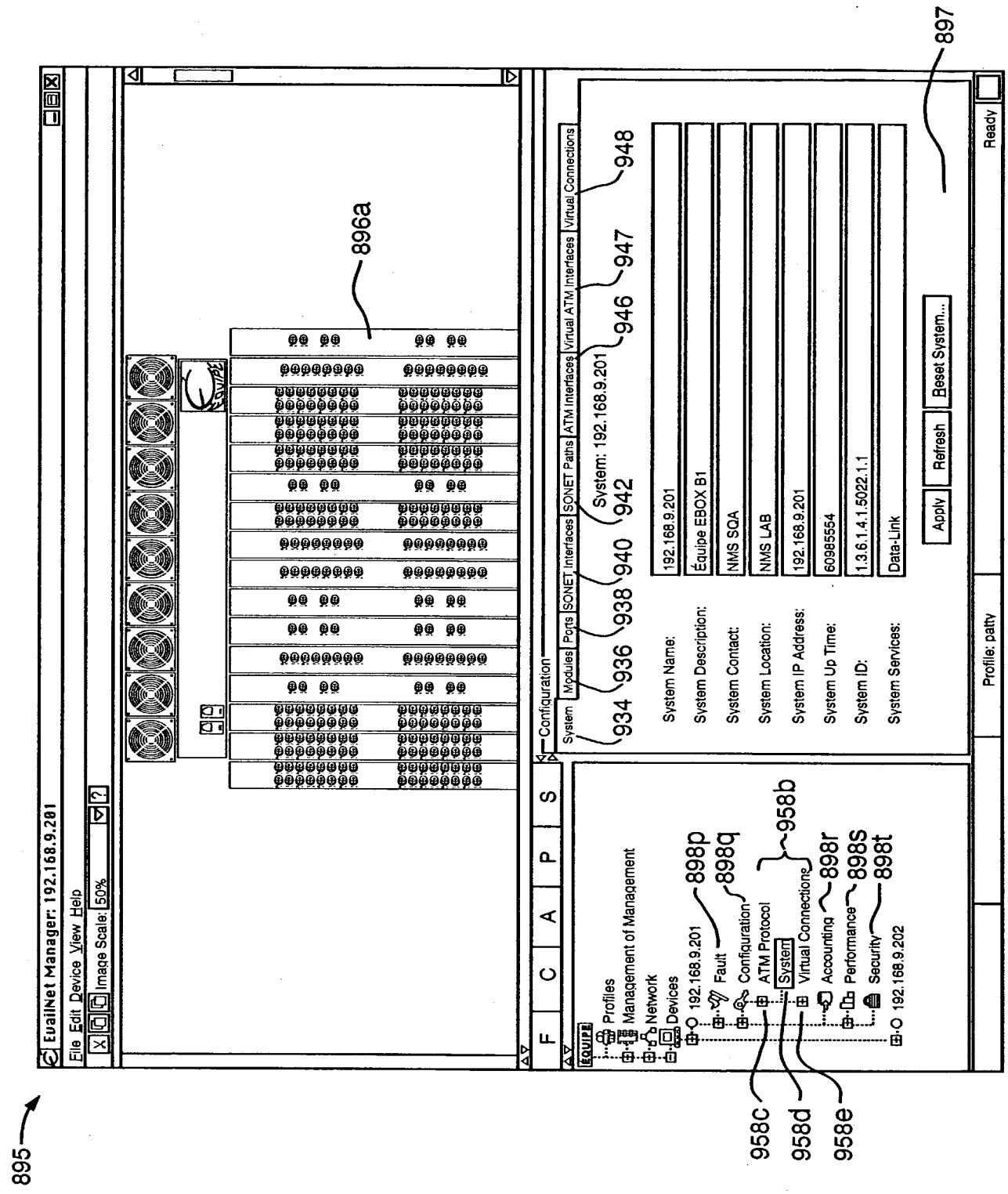

895
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
ATM Protocol
System
Virtual Connections
Accounting
Performance
Security
192.168.9.202
898p
898q
958b
898r
898s
898t
958c
958d
958e
896a
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
934
936
938
940
942
946
947
948
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
192.168.9.201
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.201
60985554
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
897
Profile: patty
Ready

FIG. 7H

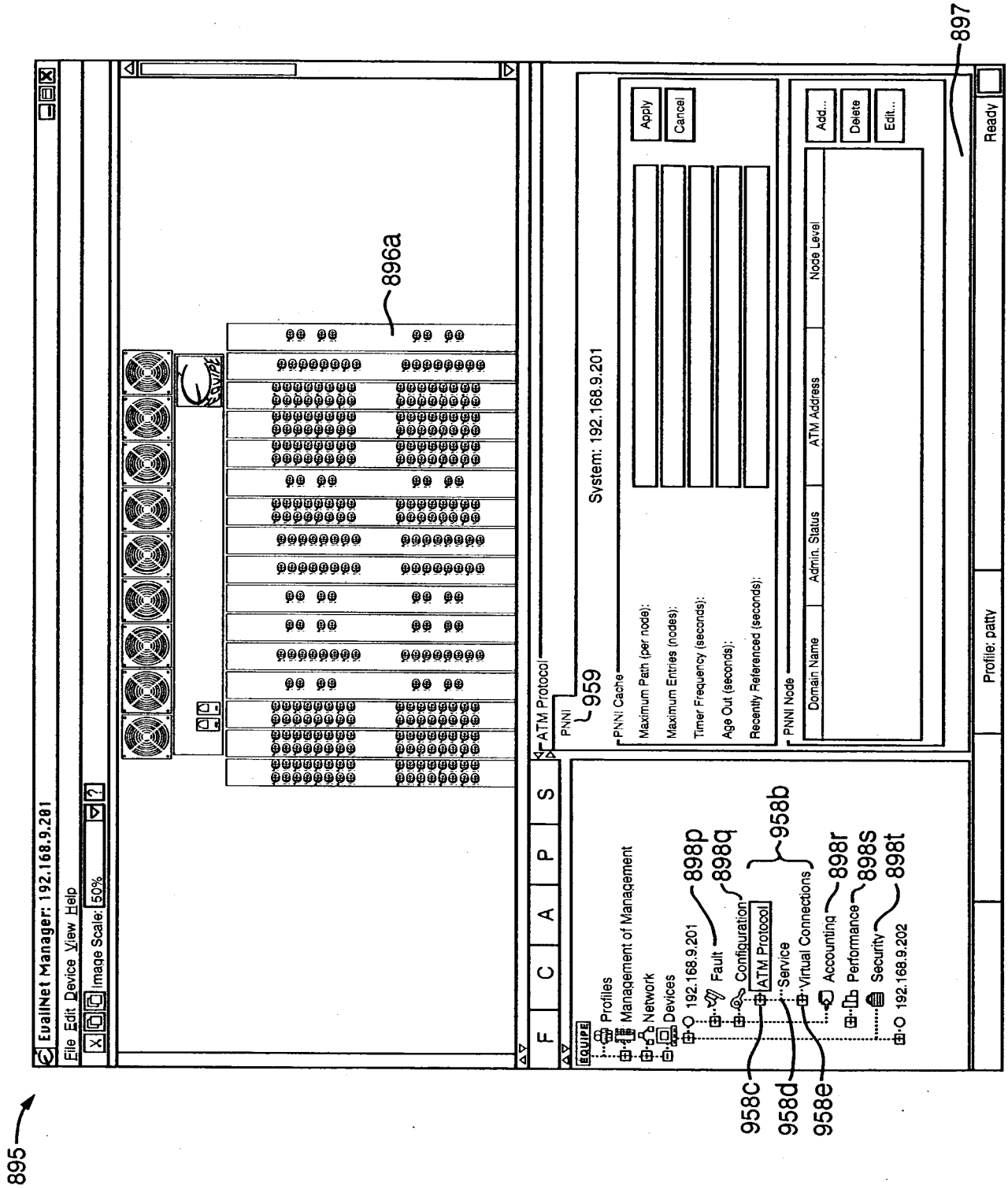

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
ATM Protocol
Service
Virtual Connections
Accounting
Performance
Security
192.168.9.202
898p
898q
958b
898r
898s
898t
958c
958d
958e
ATM Protocol
PNNI
959
System: 192.168.9.201
PNNI Cache
Maximum Path (per node):
Maximum Entries (nodes):
Timer Frequency (seconds):
Age Out (seconds):
Recently Referenced (seconds):
Apply
Cancel
PNNI Node
Domain Name
Admin. Status
ATM Address
Node Level
Add...
Delete
Edit...
Profile: patty
Ready

FIG. 71

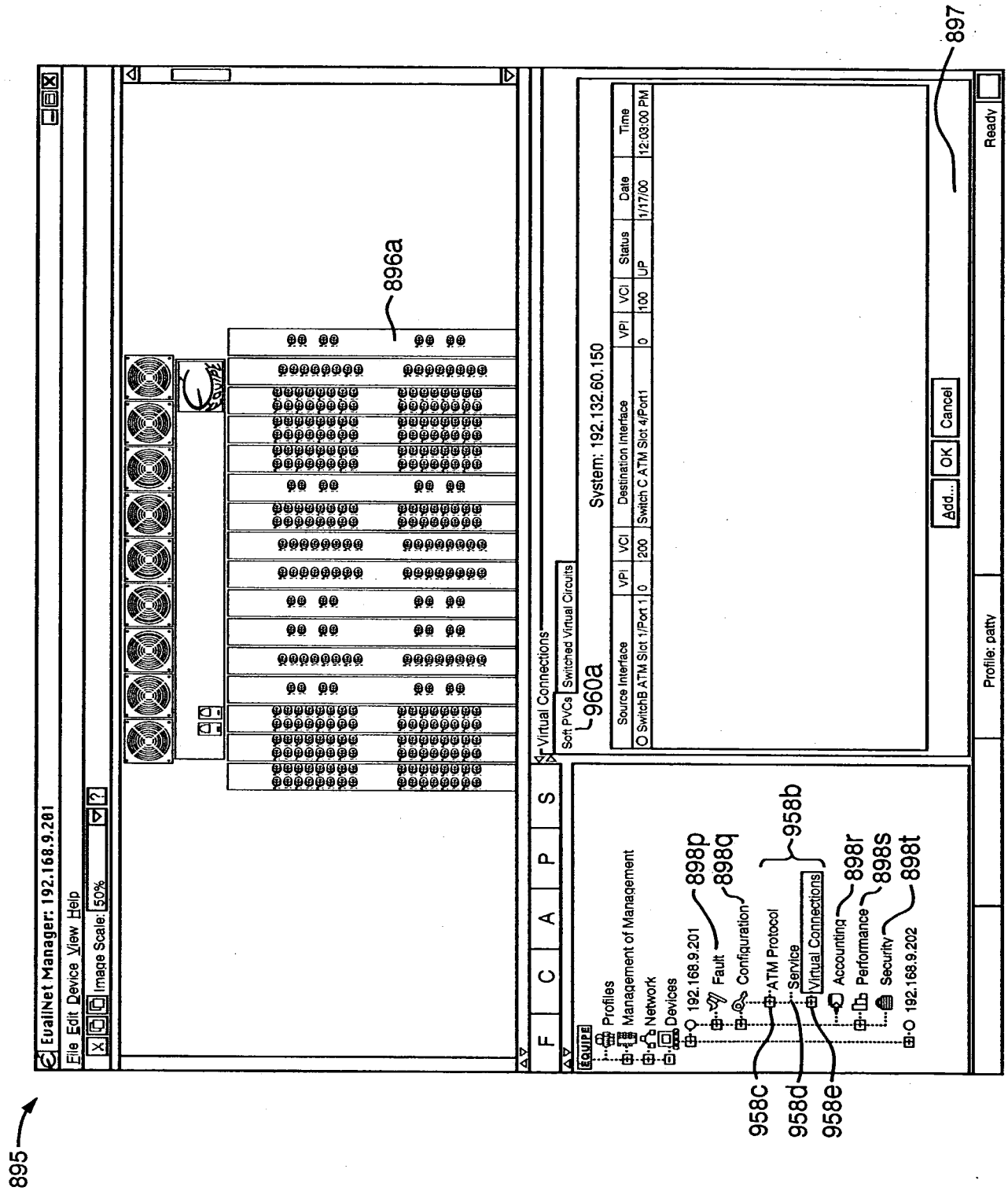

EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
ATM Protocol
Service
Virtual Connections
Accounting
Performance
Security
192.168.9.202
898p
898q
958b
898r
898s
898t
958c
958d
958e
Virtual Connections
Soft PVCs
Switched Virtual Circuits
960a
System: 192.132.60.150
Source Interface
VPI
VCI
Destination Interface
VPI
VCI
Status
Date
Time
SwitchB ATM Slot 1/Port 1
0
200
Switch C ATM Slot 4/Port1
0
100
UP
1/17/00
12:03:00 PM
Add...
Ok
Cancel
897
Profile: patty
Ready
895

FIG. 7J

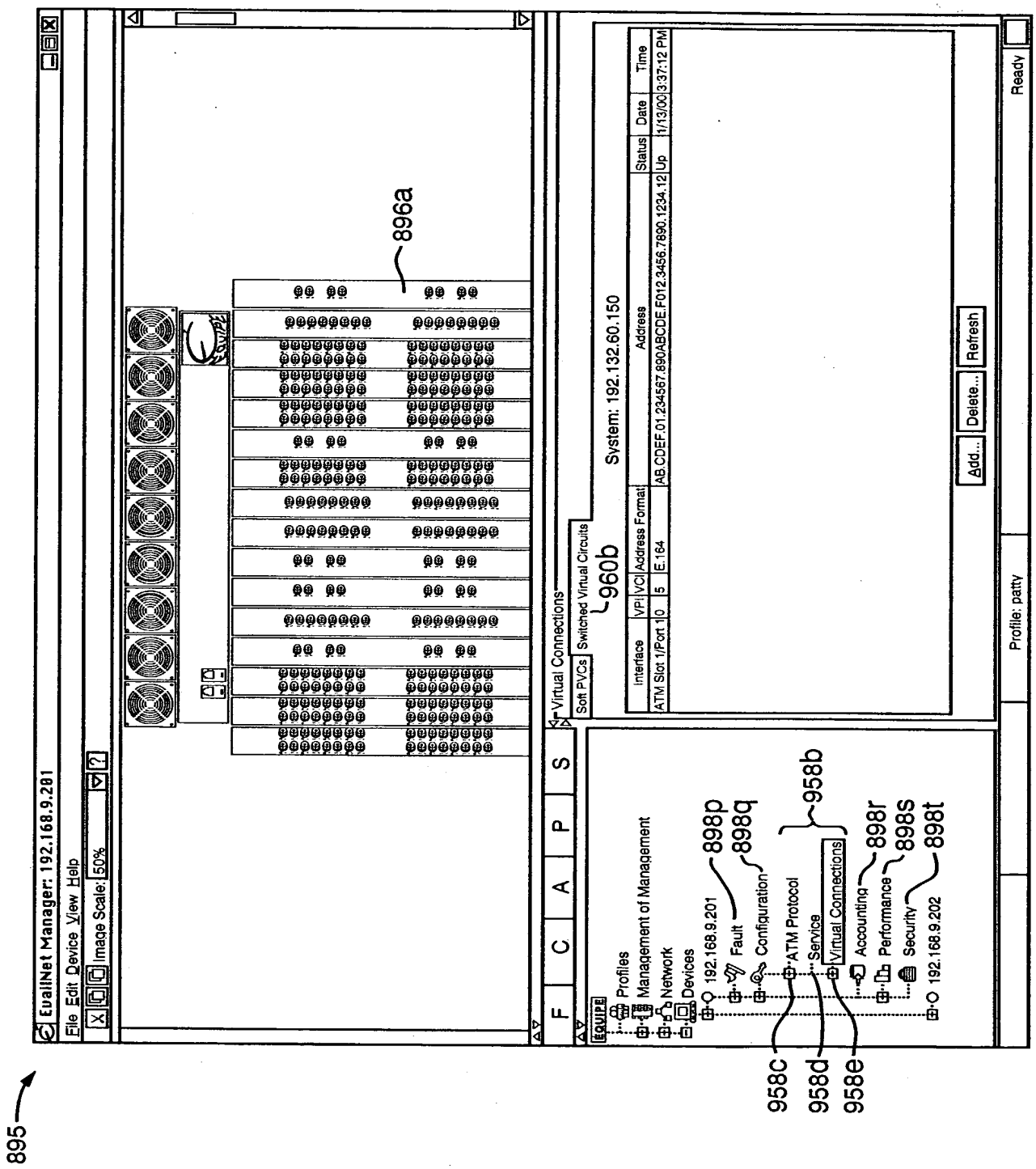

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
Virtual Connections
Soft PVCs
Switched Virtual Circuits
960b
System: 192.132.60.150
Interface
VPI
VCI
Address Format
Address
Status
Date
Time
ATM Slot 1/Port 1
0
5
E.164
AB.CDEF.01.234567.890ABCDE.F0
12.3456.7890.1234.12
Up
1/13/00
3:37:12 PM
Add...
Delete...
Refresh
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
ATM Protocol
Service
Virtual Connections
Accounting
Performance
Security
192.168.9.202
898p
898q
958b
898r
898s
898t
958c
958d
958e

FIG. 7K

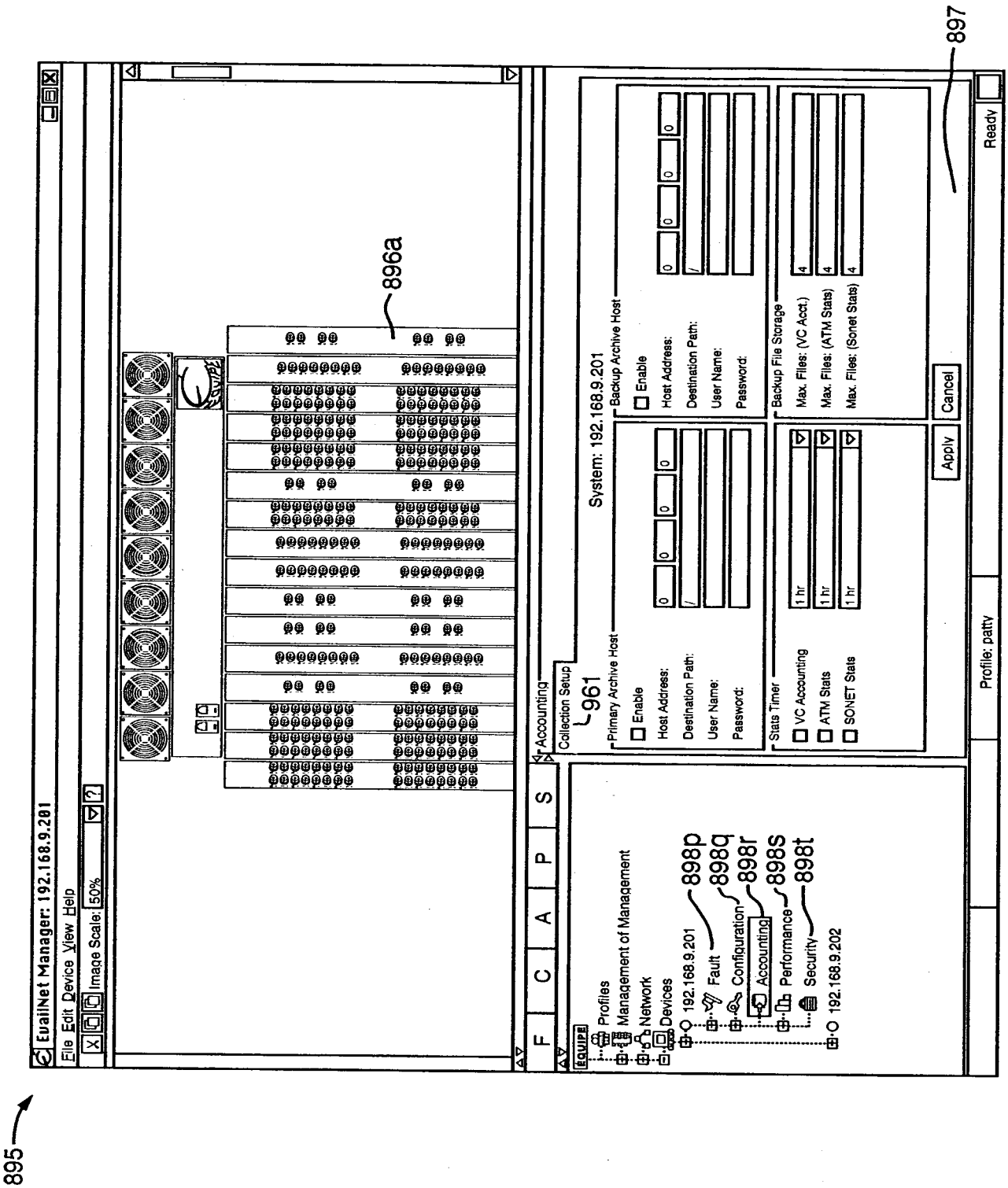

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
Accounting
Collection Setup
961
System: 192.168.9.201
Primary Archive Host
Enable
Host Address:
Destination Path:
User Name:
Password:
Backup Archive Host
Backup File Storage
Max. Files: (VC Acct.)
Max. Files: (ATM Stats)
Max. Files: (Sonet Stats)
Stats Timer
VC Accounting
ATM Stats
SONET Stats
1 hr
Apply
Cancel
897
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
192.168.9.202
898p
898q
898r
898s
898t

FIG. 7L

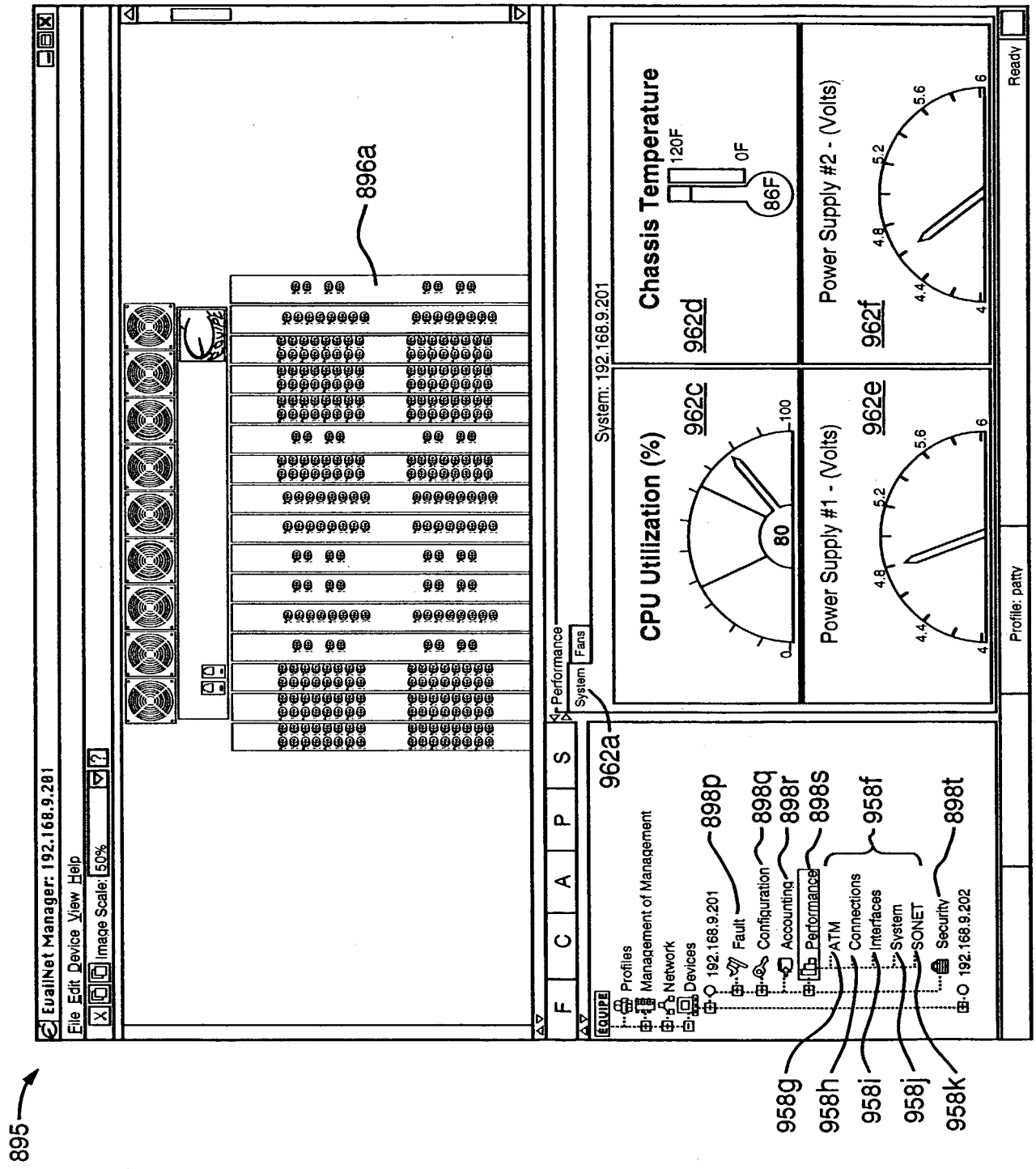

EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
EQUIPE
Performance
System Fans
System: 192.168.9.201
CPU Utilization (%)
962c
80
0
100
Chassis Temperature
962d
120F
0F
86F
Power Supply #1 - (Volts)
962e
Power Supply #2 - (Volts)
962f
4
4.4
4.8
5.2
5.6
6
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
962a
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
Profile: patty
Ready
895

FIG. 7M

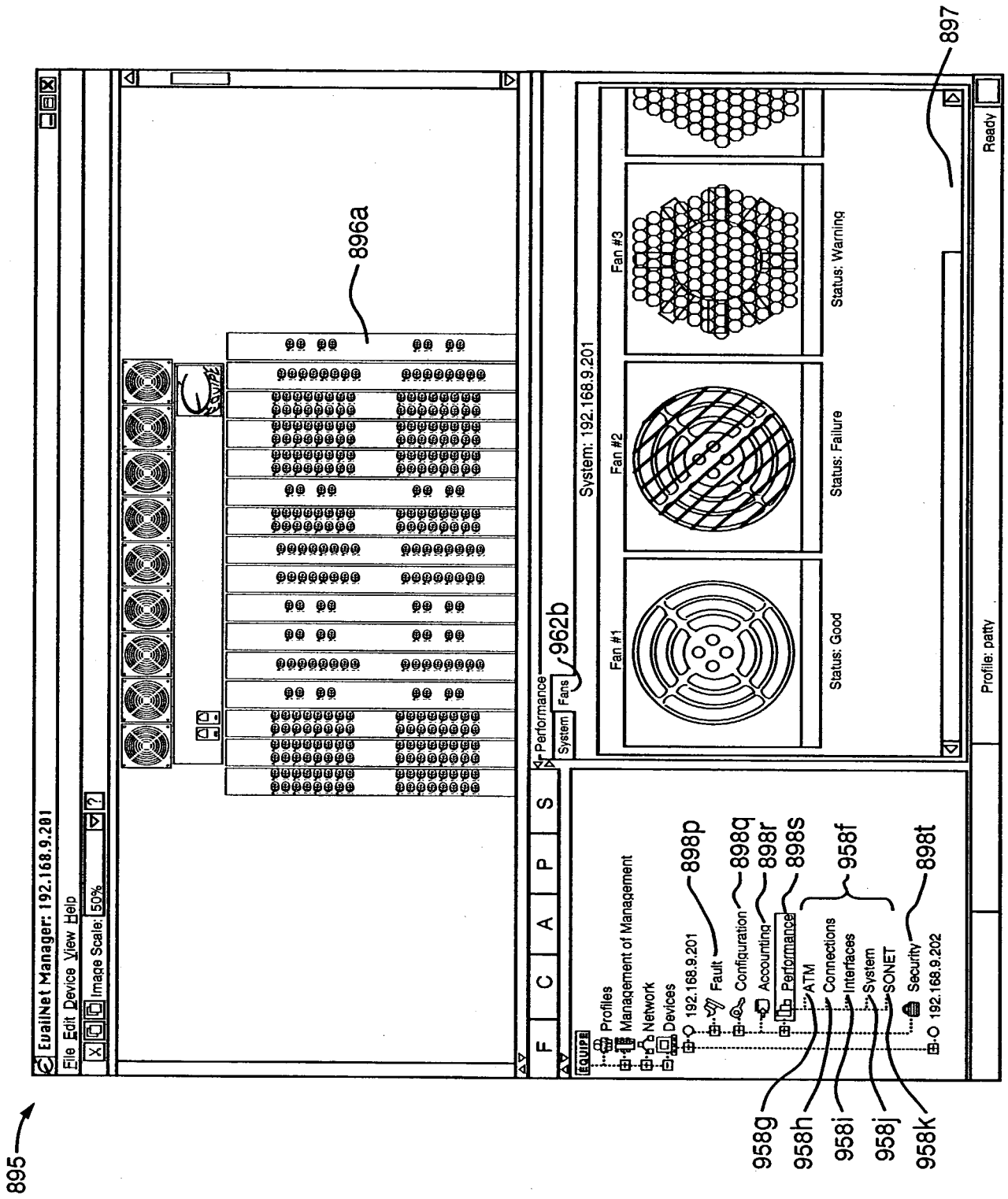

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
Ready
Profile: patty
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
Performance
System
Fans
962b
System: 192.168.9.201
Fan #1
Fan #2
Fan #3
Status: Good
Status: Failure
Status: Warning

FIG. 7N

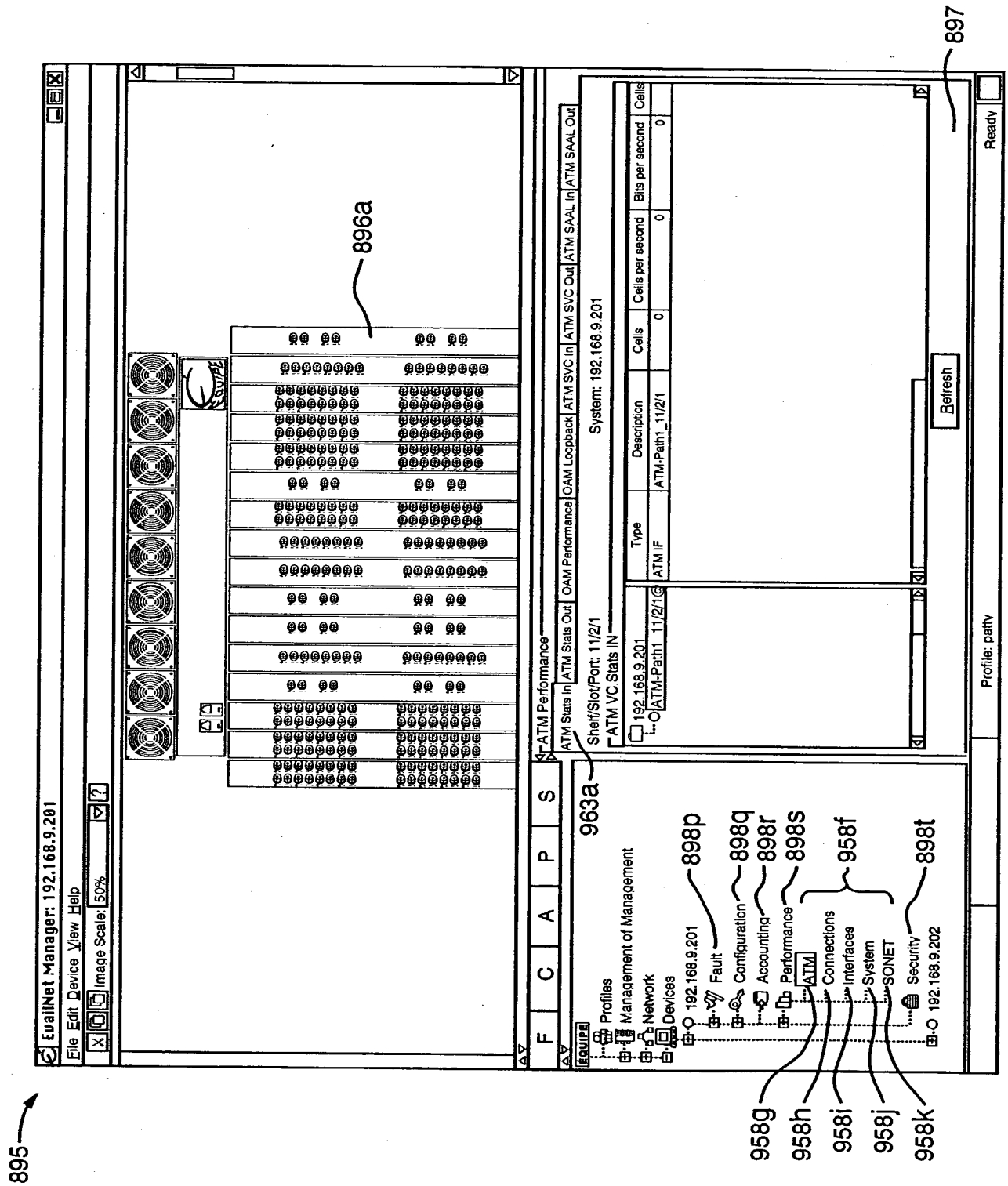

895
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
ATM VC Stats IN
192.168.9.201
ATM-Path1 11/2/1@
Type
Description
Cells
Cells per second
Bits per second
Cells
ATM IF
ATM-Path1_11/2/1
0
0
0
Refresh
Ready
Profile: patty
F C A P S
963a
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 70

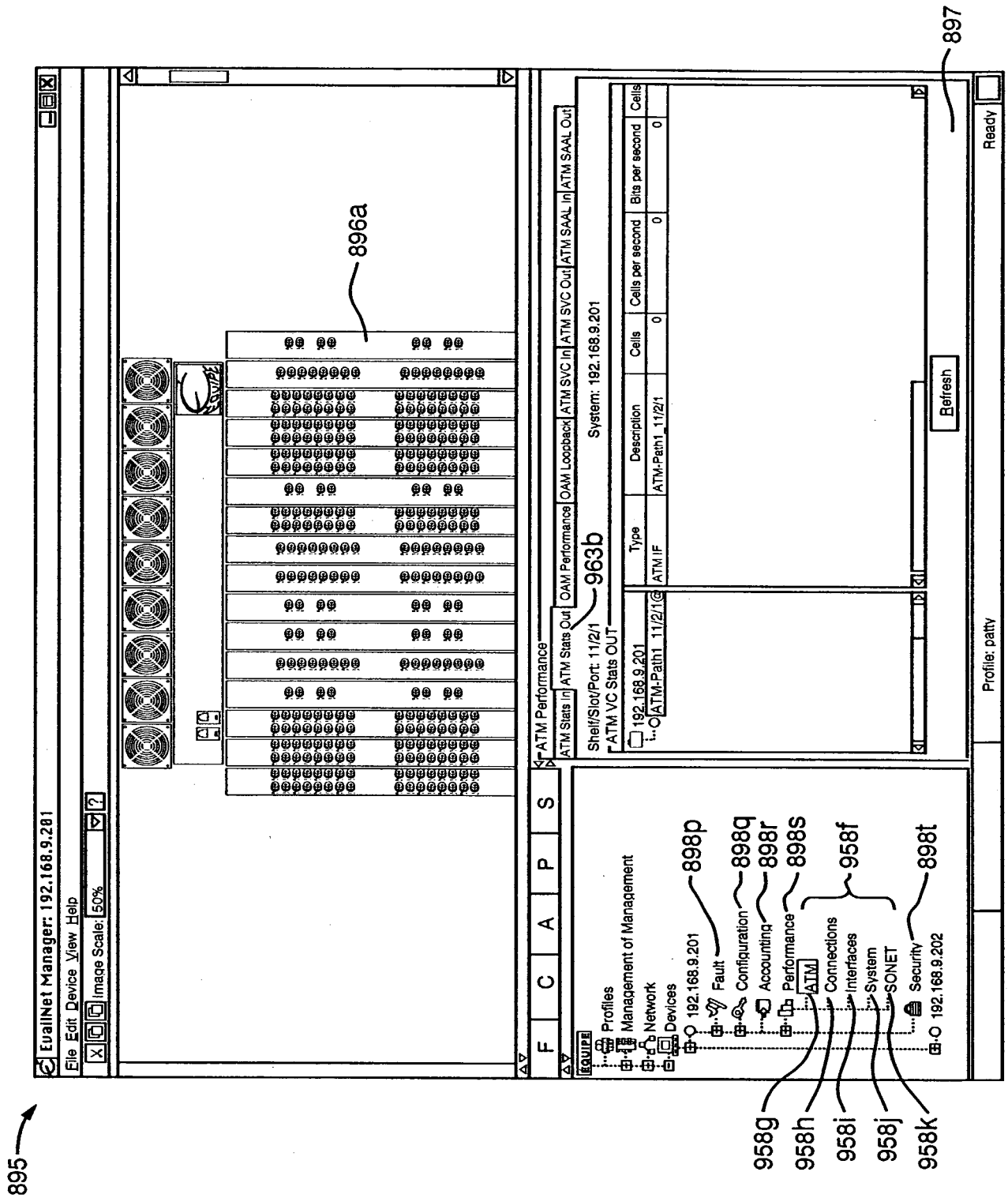

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
963b
System: 192.168.9.201
Shelf/Slot/Port: 11/2/1
ATM VC Stats OUT
192.168.9.201
ATM-Path1_11/2/1
Type
Description
Cells
Cells per second
Bits per second
Cells
ATM IF
ATM-Path1_11/2/1
0
0
0
Refresh
897
Ready
Profile: patty

FIG. 7P

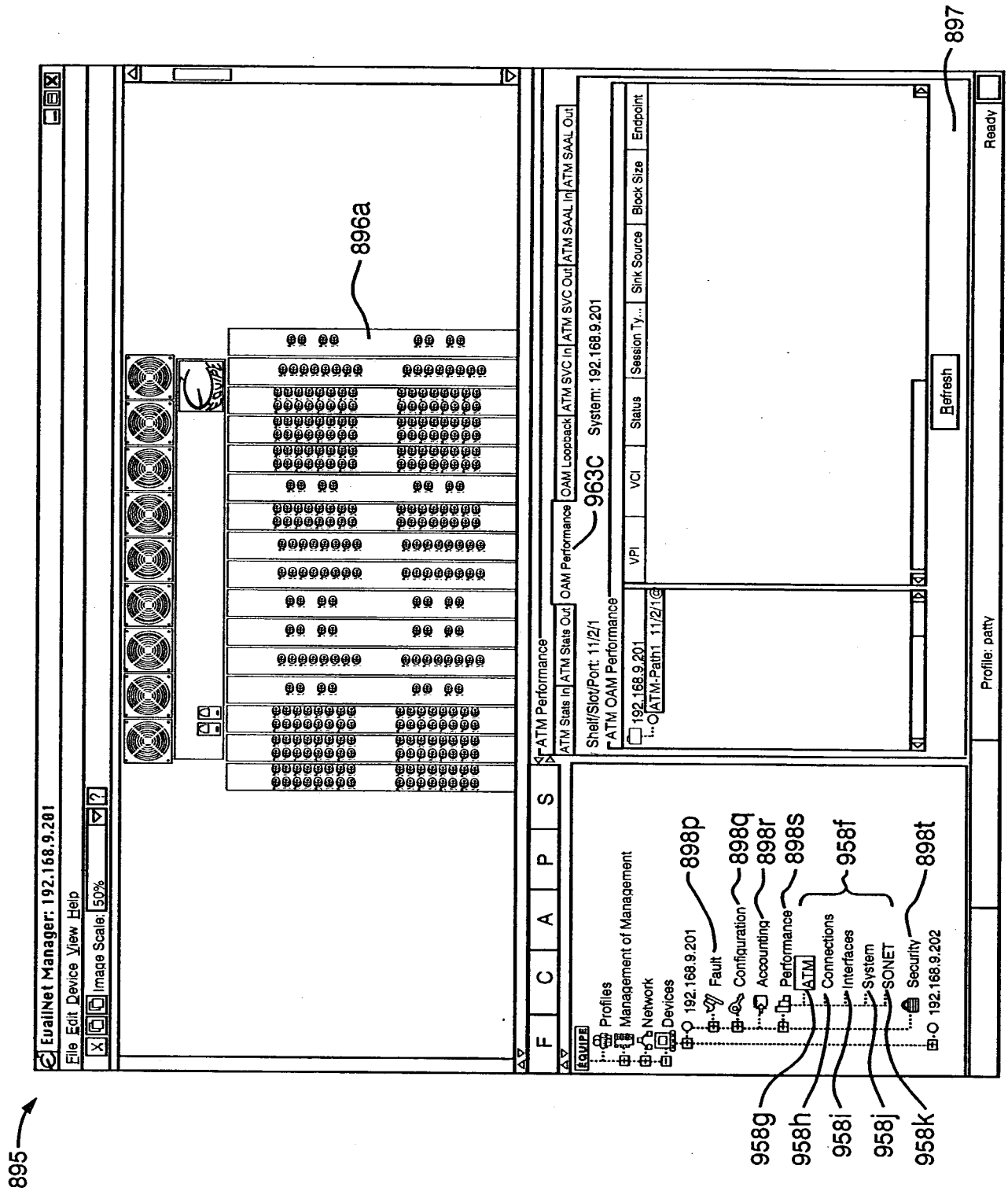

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
Equipe
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
963C
System: 192.168.9.201
Shelf/Slot/Port: 11/2/1
ATM OAM Performance
192.168.9.201
ATM-Path1 11/2/1
VPI
VCI
Status
Session Ty...
Sink Source
Block Size
Endpoint
Refresh
897
Ready
Profile: patty

FIG. 7Q

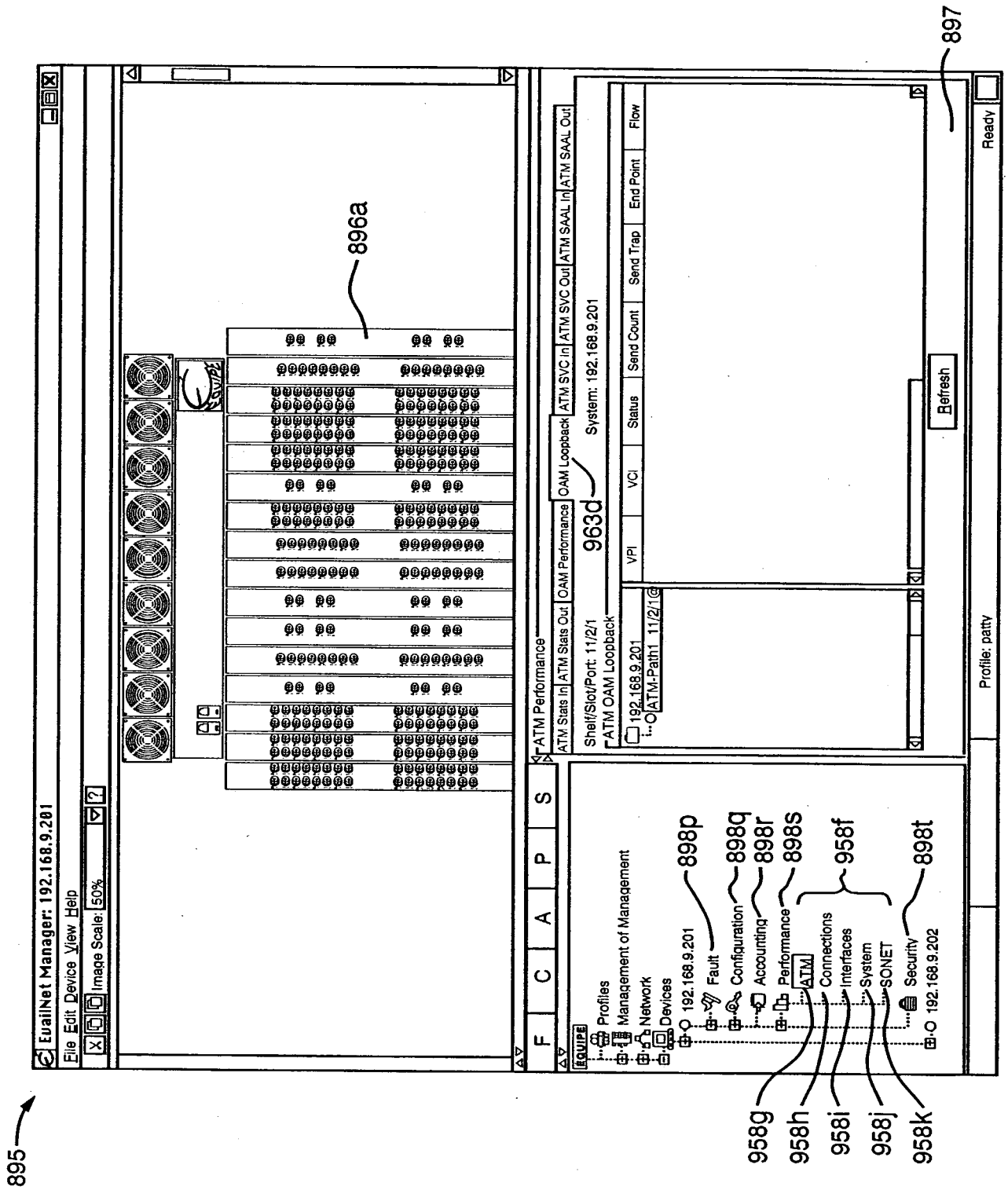

895
EuaiNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F
C
A
P
S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
Shelf/Slot/Port: 11/2/1
963d
System: 192.168.9.201
ATM OAM Loopback
192.168.9.201
ATM-Path1 11/2/1
VPI
VCI
Status
Send Count
Send Trap
End Point
Flow
Refresh
897
Ready
Profile: patty

FIG. 7R

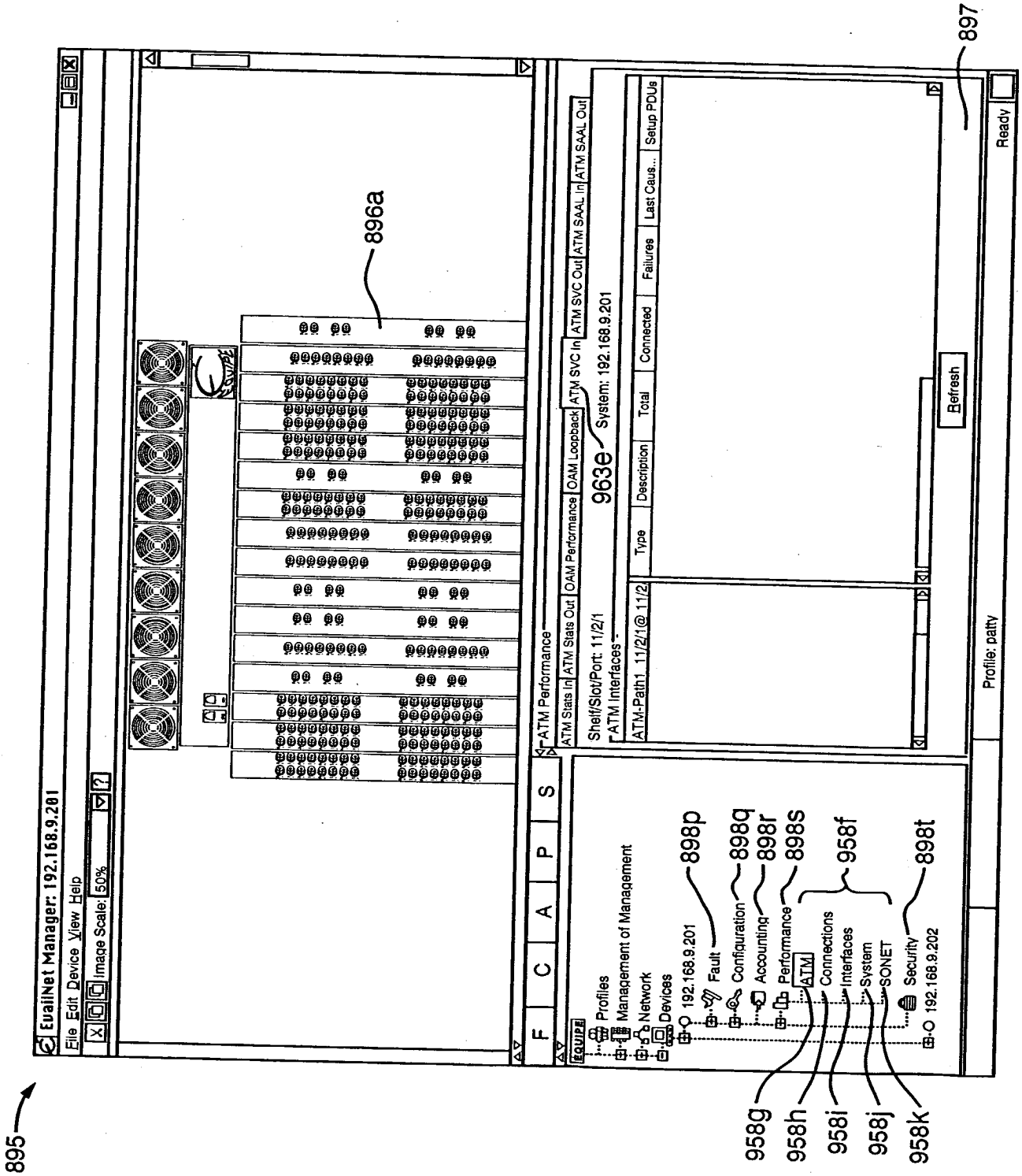

895
EvaliNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
963e
ATM Interfaces
ATM-Path1 11/2/1@ 11/2
Type
Description
Total
Connected
Failures
Last Caus...
Setup PDUs
Refresh
Ready
Profile: patty
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 7S

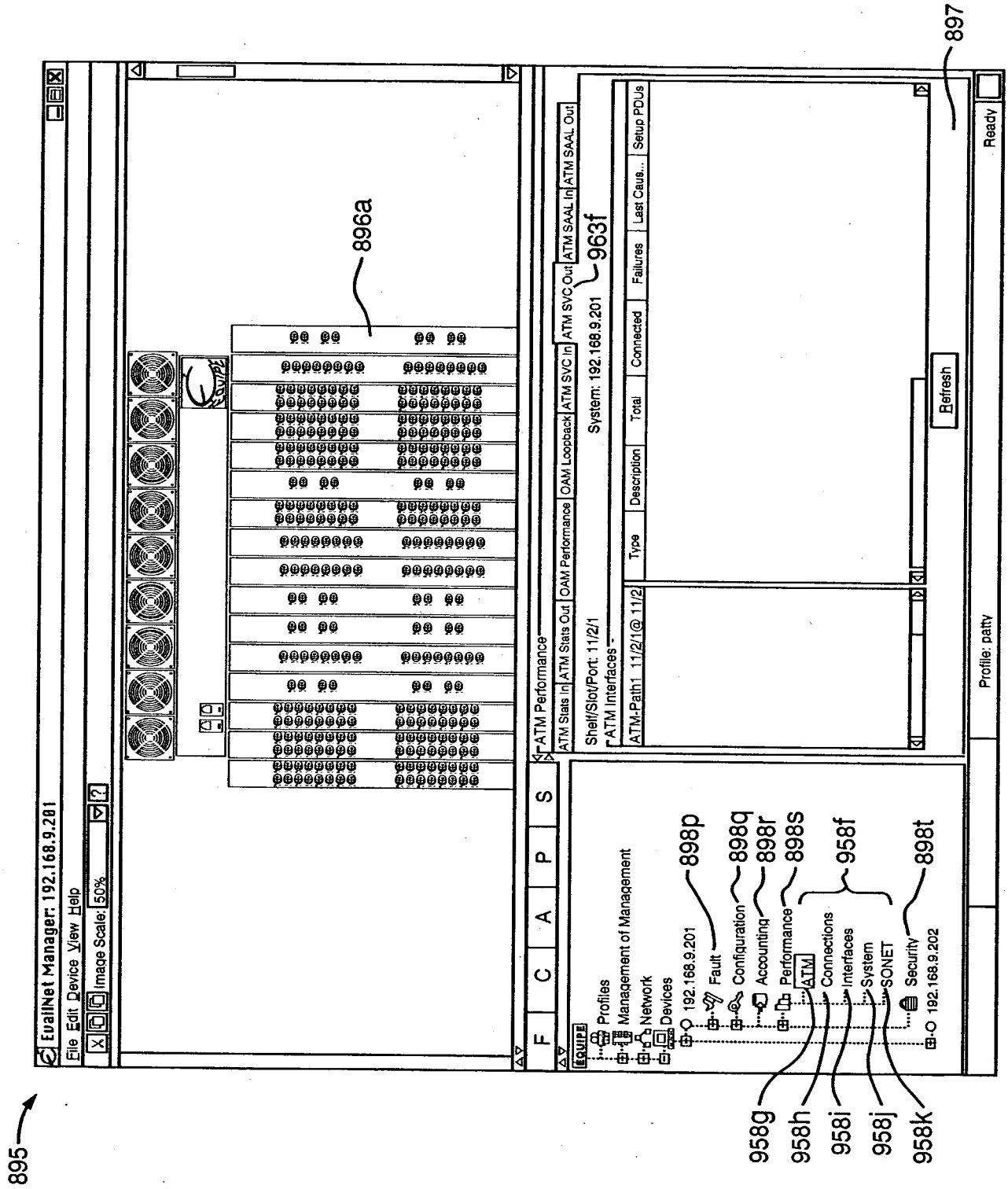

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
963f
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
ATM Interfaces
ATM-Path1 11/2/1@ 11/2
Type
Description
Total
Connected
Failures
Last Caus...
Setup PDUs
Refresh
897
Ready
Profile: patty

FIG. 7T

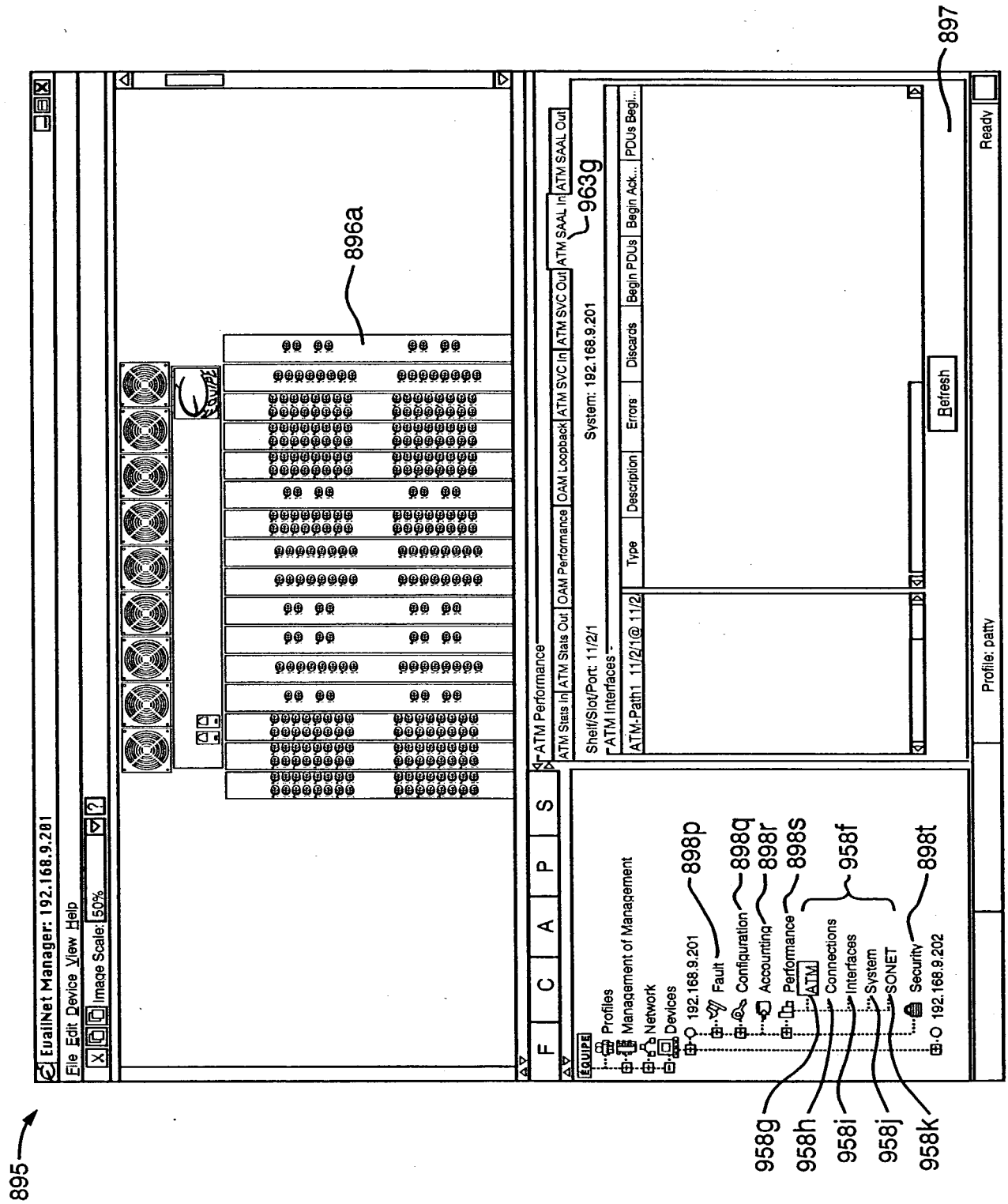

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
963g
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
ATM Interfaces
ATM-Path1 11/2/1@ 11/2
Type
Description
Errors
Discards
Begin PDUs
Begin Ack...
PDUs Begi...
Refresh
Ready
Profile: patty
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 7U

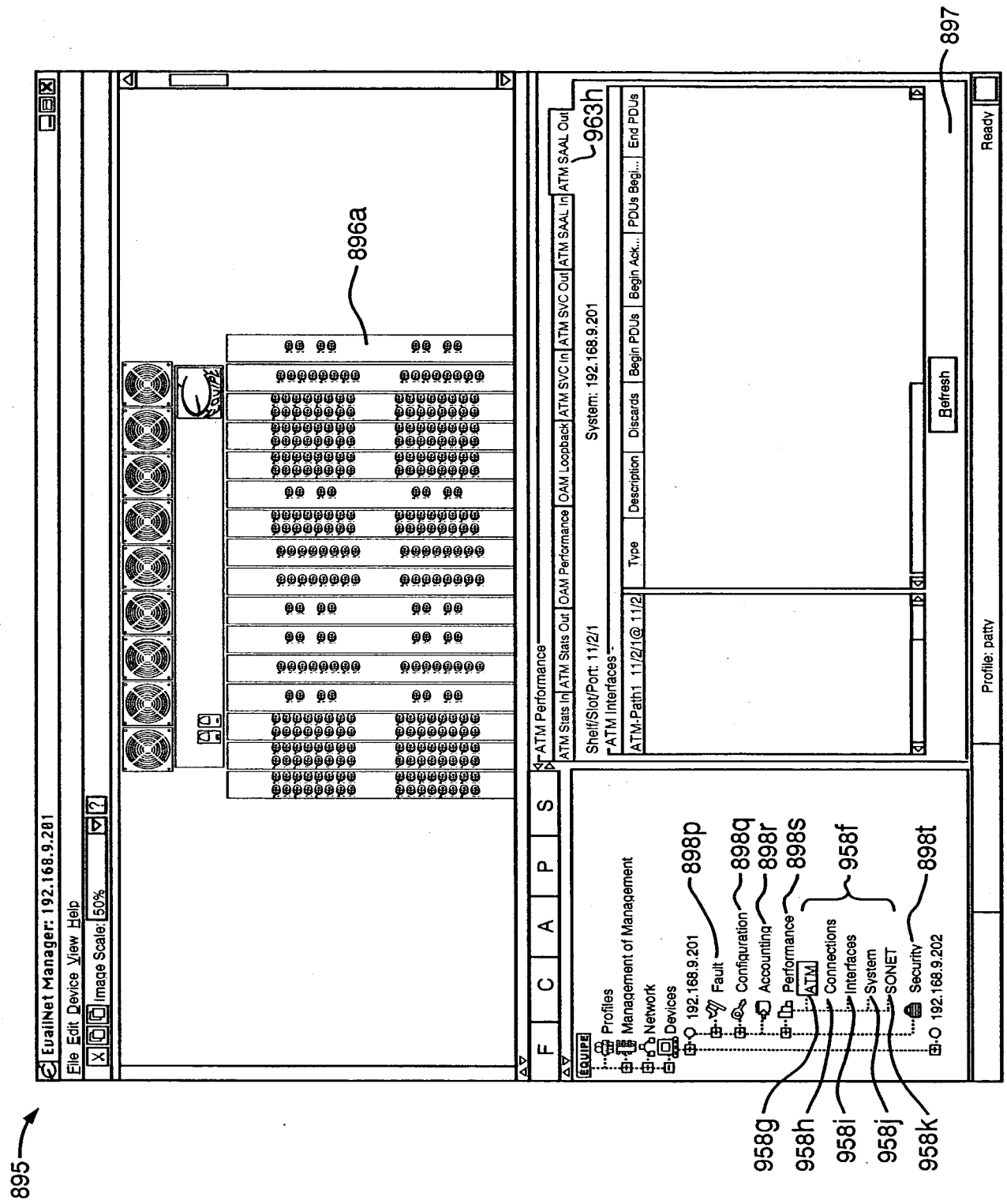

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
ATM Performance
ATM Stats In
ATM Stats Out
OAM Performance
OAM Loopback
ATM SVC In
ATM SVC Out
ATM SAAL In
ATM SAAL Out
963h
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
ATM Interfaces
ATM-Path1 11/2/1@ 11/2
Type
Description
Discards
Begin PDUs
Begin Ack...
PDUs Begi...
End PDUs
Refresh
897
Ready
Profile: patty

FIG. 7V

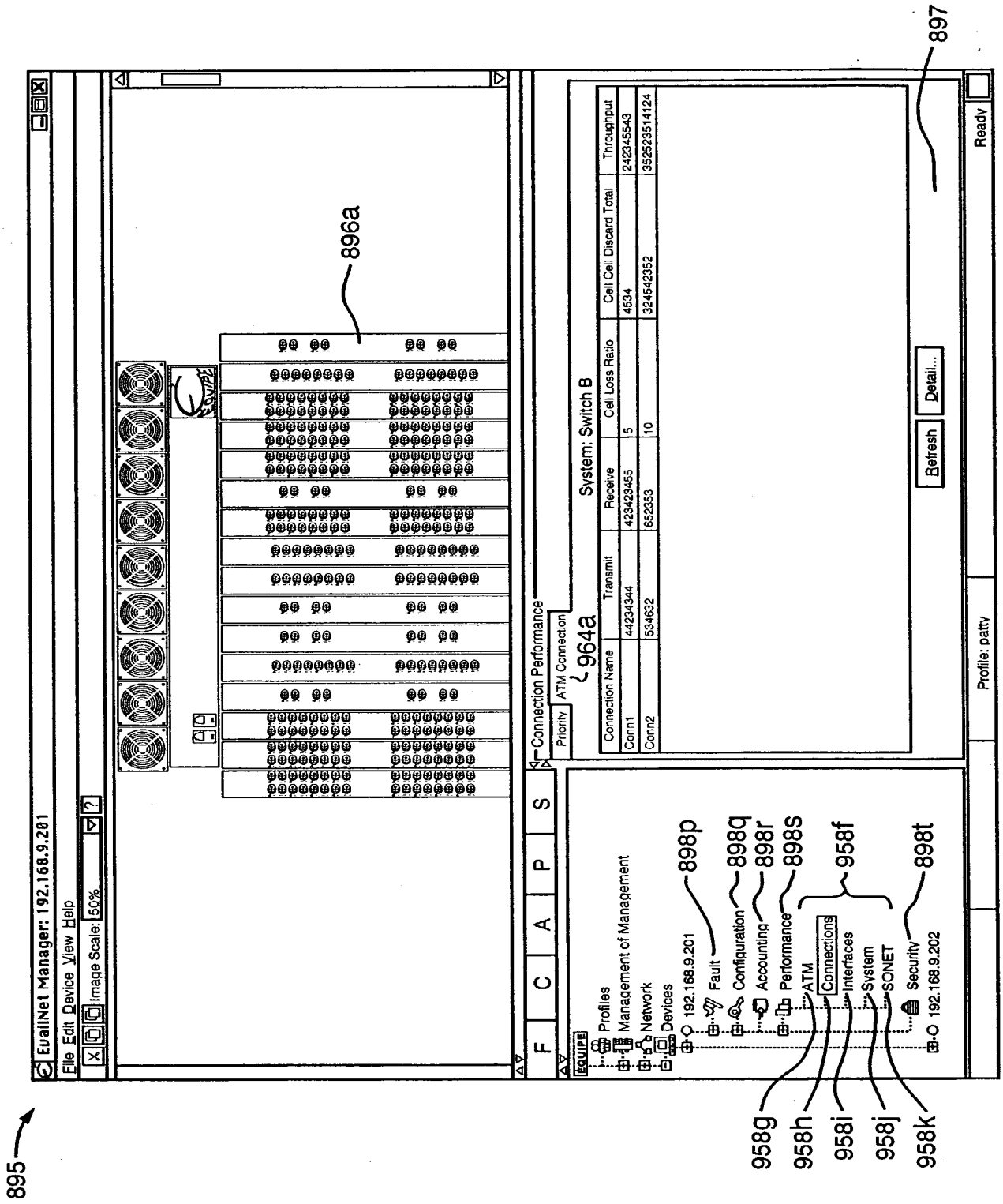

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
Connection Performance
Priority ATM Connection
964a
System: Switch B
Connection Name | Transmit | Receive | Cell Loss Ratio | Cell Cell Discard Total | Throughput
Conn1 | 44234344 | 423423455 | 5 | 4534 | 242345543
Conn2 | 534632 | 652353 | 10 | 324542352 | 352523514124
Refresh
Detail...
897
Ready
Profile: patty
EQUIP
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 7W

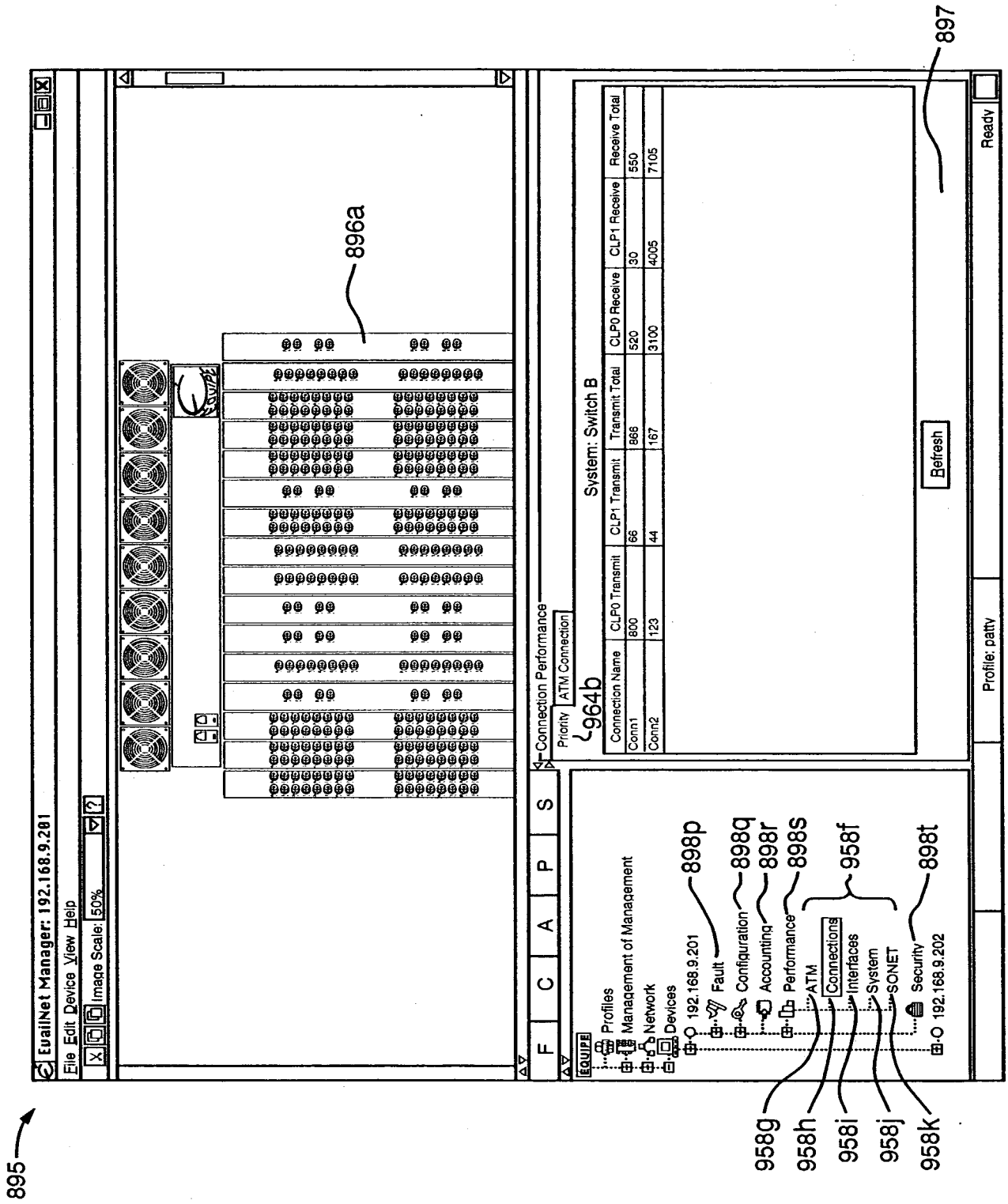

895
897
896a
964b
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
F C A P S
Connection Performance
Priority
ATM Connection
System: Switch B
Connection Name | CLP0 Transmit | CLP1 Transmit | Transmit Total | CLP0 Receive | CLP1 Receive | Receive Total
Conn1 | 800 | 66 | 866 | 520 | 30 | 550
Conn2 | 123 | 44 | 167 | 3100 | 4005 | 7105
Refresh
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 7X

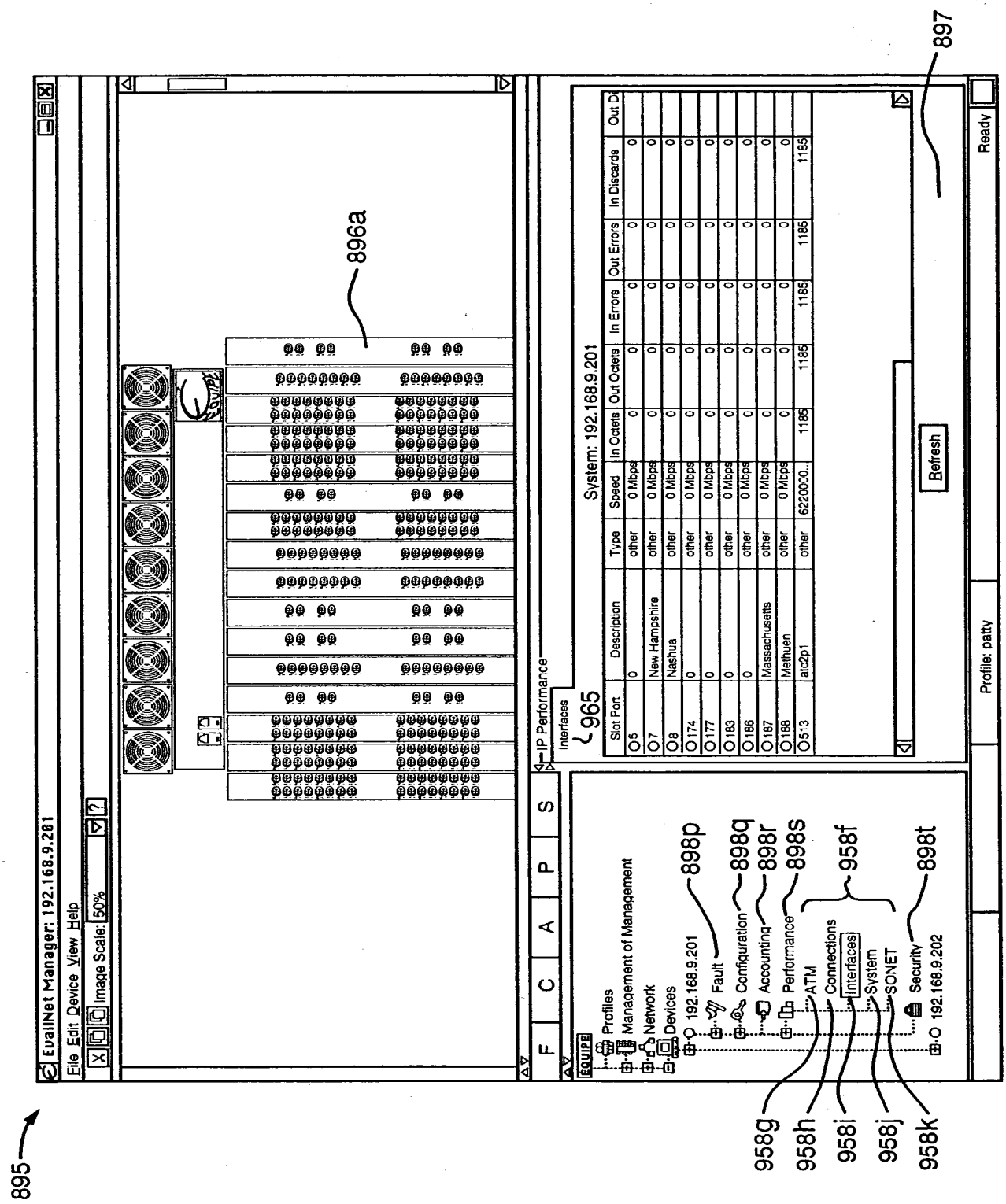

895
EvalINet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
IP Performance
Interfaces
965
System: 192.168.9.201
Slot Port | Description | Type | Speed | In Octets | Out Octets | In Errors | Out Errors | In Discards | Out D
5 | 0 | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
7 | New Hampshire | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
8 | Nashua | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
174 | 0 | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
177 | 0 | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
183 | 0 | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
186 | 0 | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
187 | Massachusetts | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
188 | Methuen | other | 0 Mbps | 0 | 0 | 0 | 0 | 0
513 | alc2p1 | other | 622000.. | 1185 | 1185 | 1185 | 1185 | 1185
Refresh
Ready
Profile: patty
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 7Y

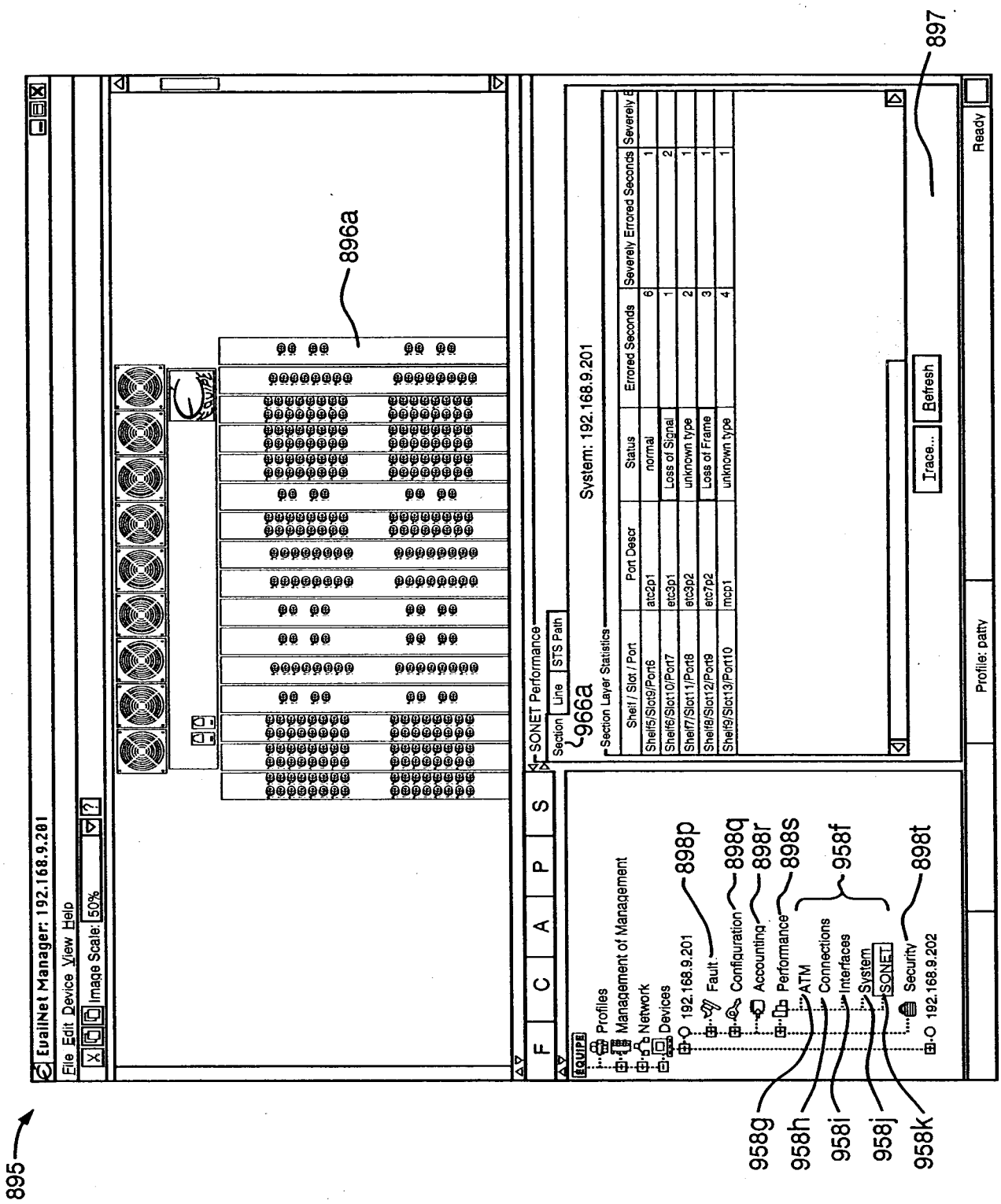

EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
SONET Performance
Section Line STS Path
966a
System: 192.168.9.201
Section Layer Statistics
Shelf / Slot / Port
Port Descr
Status
Errored Seconds
Severely Errored Seconds
Severely
Shelf5/Slot9/Port6 atc2p1 normal 6 1
Shelf6/Slot10/Port7 etc3p1 Loss of Signal 1 2
Shelf7/Slot11/Port8 etc3p2 unknown type 2 1
Shelf8/Slot12/Port9 etc7p2 Loss of Frame 3 1
Shelf9/Slot13/Port10 mcp1 unknown type 4 1
Trace...
Refresh
897
Ready
Profile: patty
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
895
958g
958h
958i
958j
958k

FIG. 8A

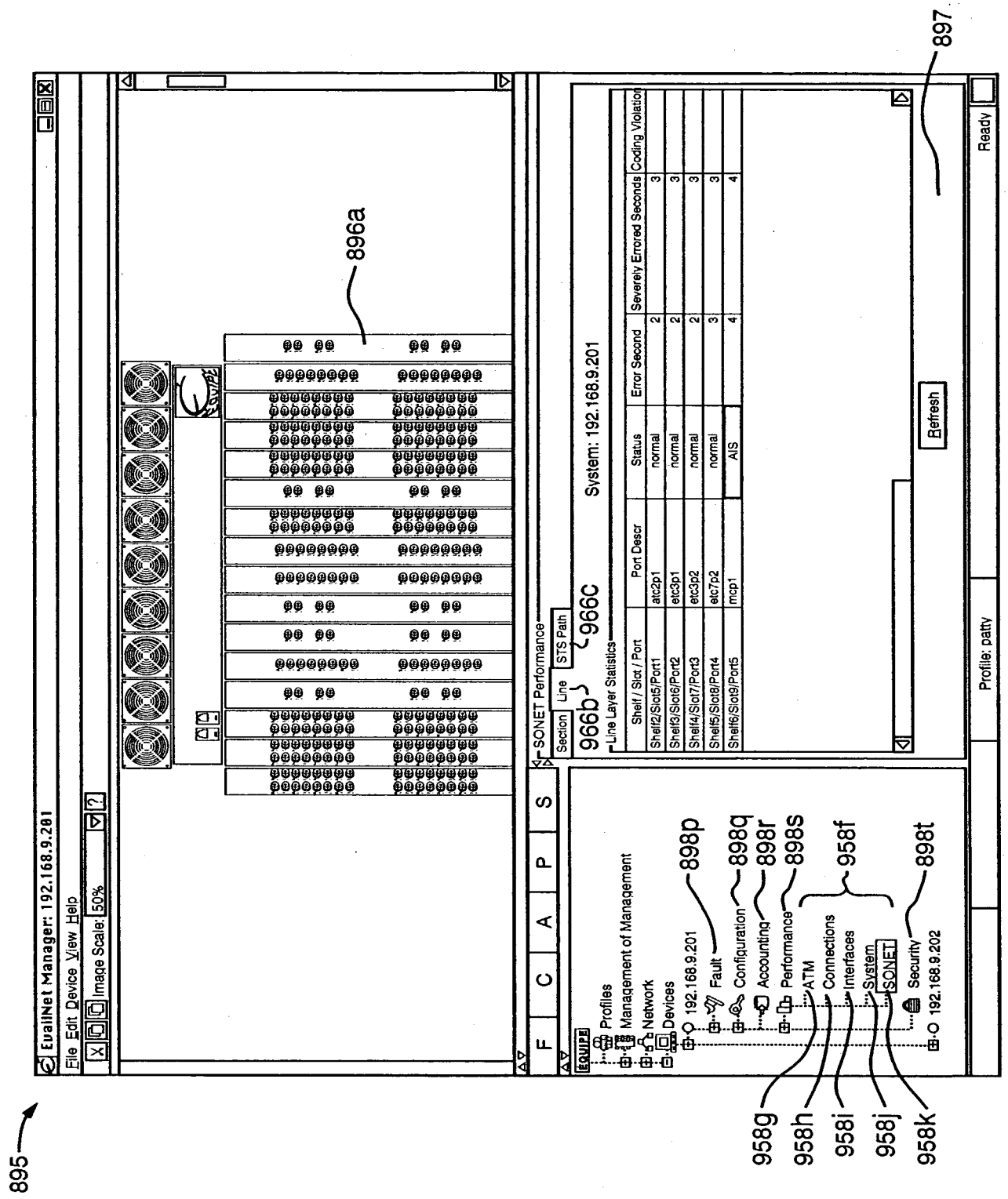

895
EvalINet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k
SONET Performance
Section
Line
STS Path
966b
966c
System: 192.168.9.201
Line Layer Statistics
Shelf / Slot / Port
Port Descr
Status
Error Second
Severely Errored Seconds
Coding Violation
Shelf2/Slot5/Port1
atc2p1
normal
2
3
Shelf3/Slot6/Port2
etc3p1
normal
2
3
Shelf4/Slot7/Port3
etc3p2
normal
2
3
Shelf5/Slot8/Port4
etc7p2
normal
3
3
Shelf6/Slot9/Port5
mcp1
AIS
4
4
Refresh
897
Ready
Profile: patty

FIG. 8B

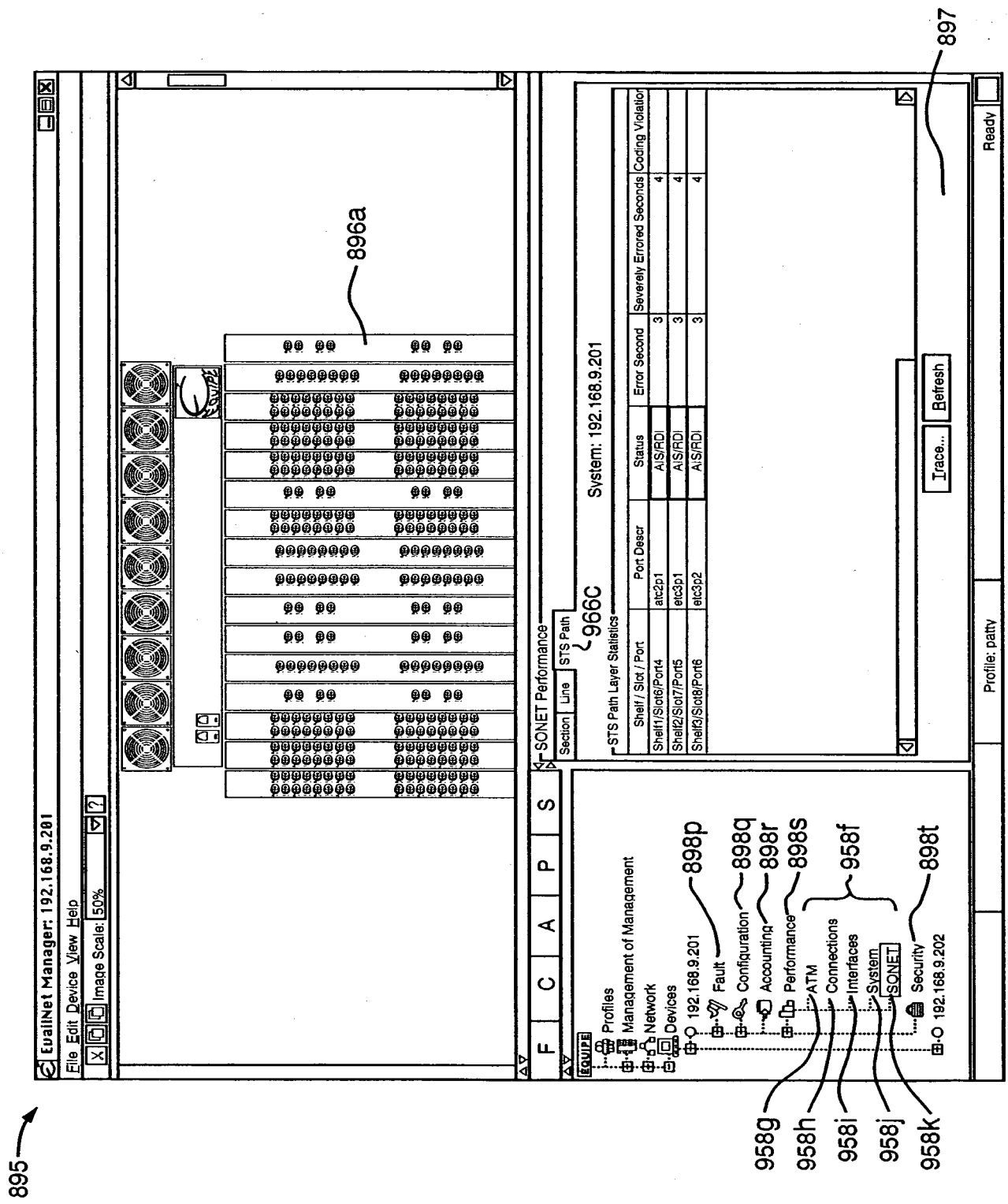

895
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
SONET Performance
Section Line STS Path
966C
System: 192.168.9.201
STS Path Layer Statistics
Shelf / Slot / Port
Port Descr
Status
Error Second
Severely Errored Seconds
Coding Violation
Shelf1/Slot6/Port4
atc2p1
AIS/RDI
3
4
Shelf2/Slot7/Port5
etc3p1
AIS/RDI
3
4
Shelf3/Slot8/Port6
etc3p2
AIS/RDI
3
4
Trace...
Refresh
Ready
Profile: patty
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
ATM
Connections
Interfaces
System
SONET
Security
192.168.9.202
898p
898q
898r
898s
958f
898t
958g
958h
958i
958j
958k

FIG. 8C

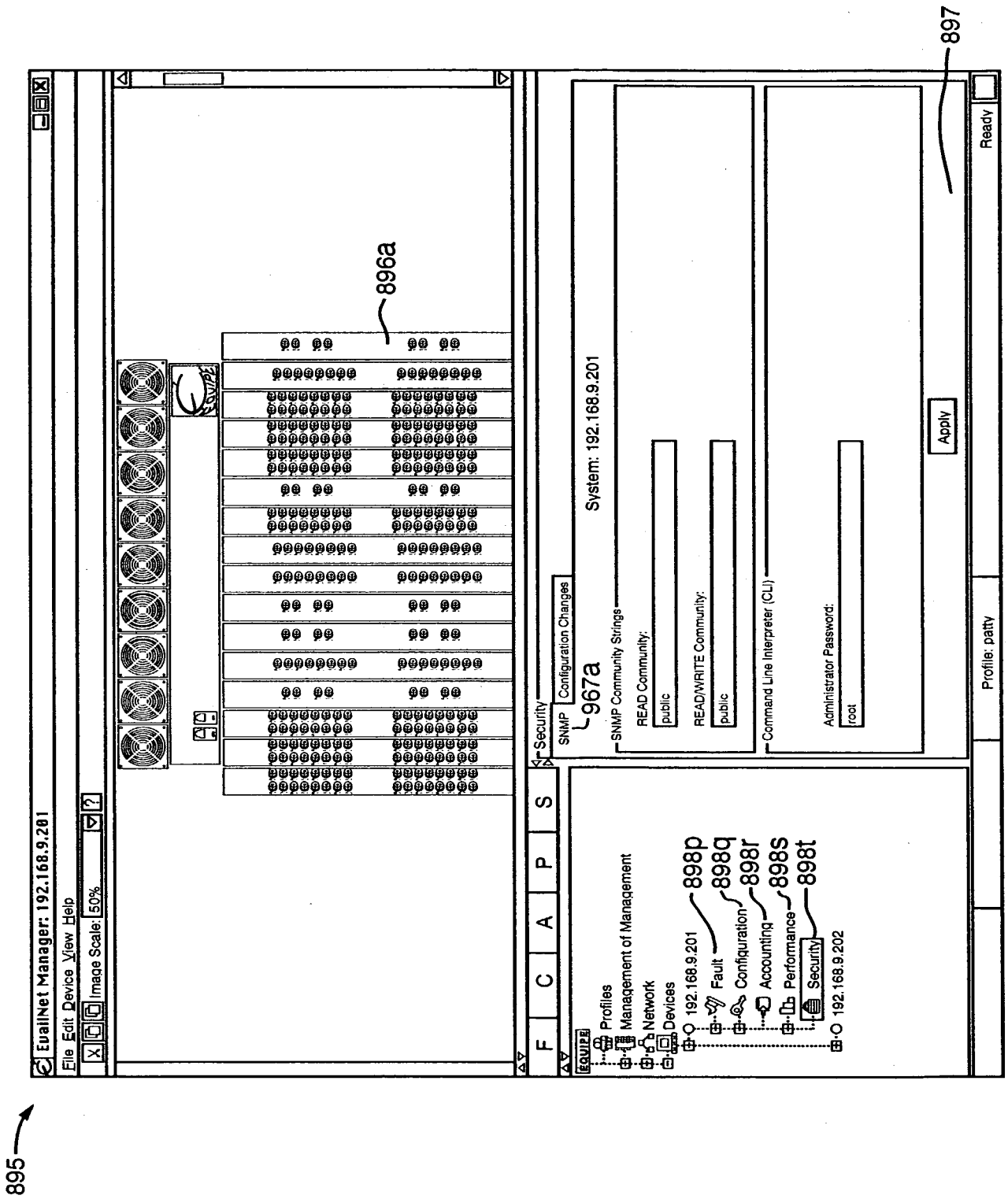

895
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
F C A P S
Security
SNMP
Configuration Changes
967a
System: 192.168.9.201
SNMP Community Strings
READ Community:
public
READ/WRITE Community:
public
Command Line Interpreter (CLI)
Administrator Password:
root
Apply
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
192.168.9.202
898p
898q
898r
898s
898t

FIG. 8D

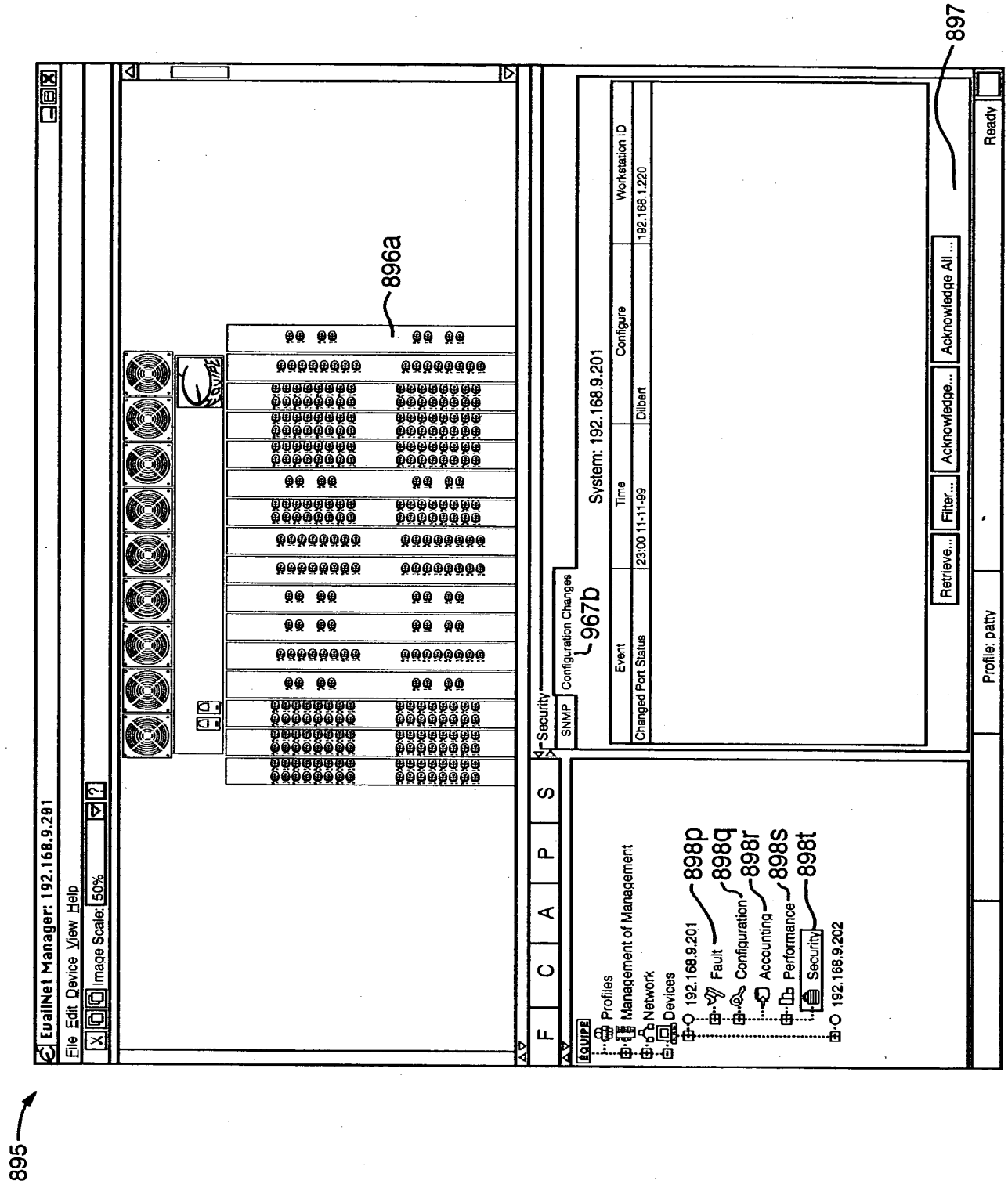

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 50%
896a
897
F C A P S
Security
SNMP
Configuration Changes
967b
System: 192.168.9.201
Event
Time
Configure
Workstation ID
Changed Port Status
23:00 11-11-99
Dilbert
192.168.1.220
Retrieve...
Filter...
Acknowledge...
Acknowledge All...
Ready
Profile: patty
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
192.168.9.202
898p
898q
898r
898s
898t

FIG. 8E

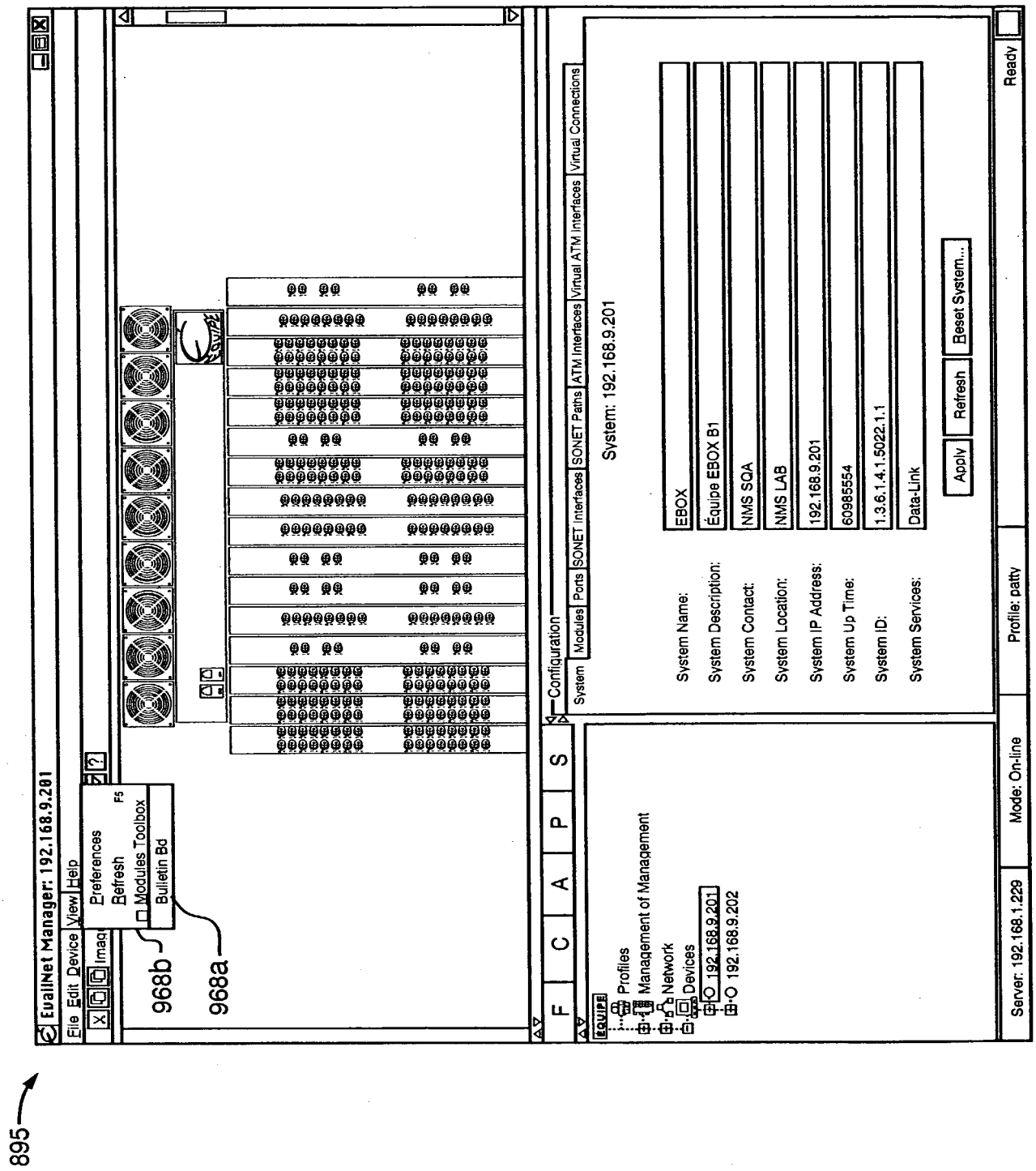

895
968a
968b
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Preferences
Refresh F5
Modules Toolbox
Bulletin Bd
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.201
System Up Time: 60985554
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply Refresh Reset System...
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 9A

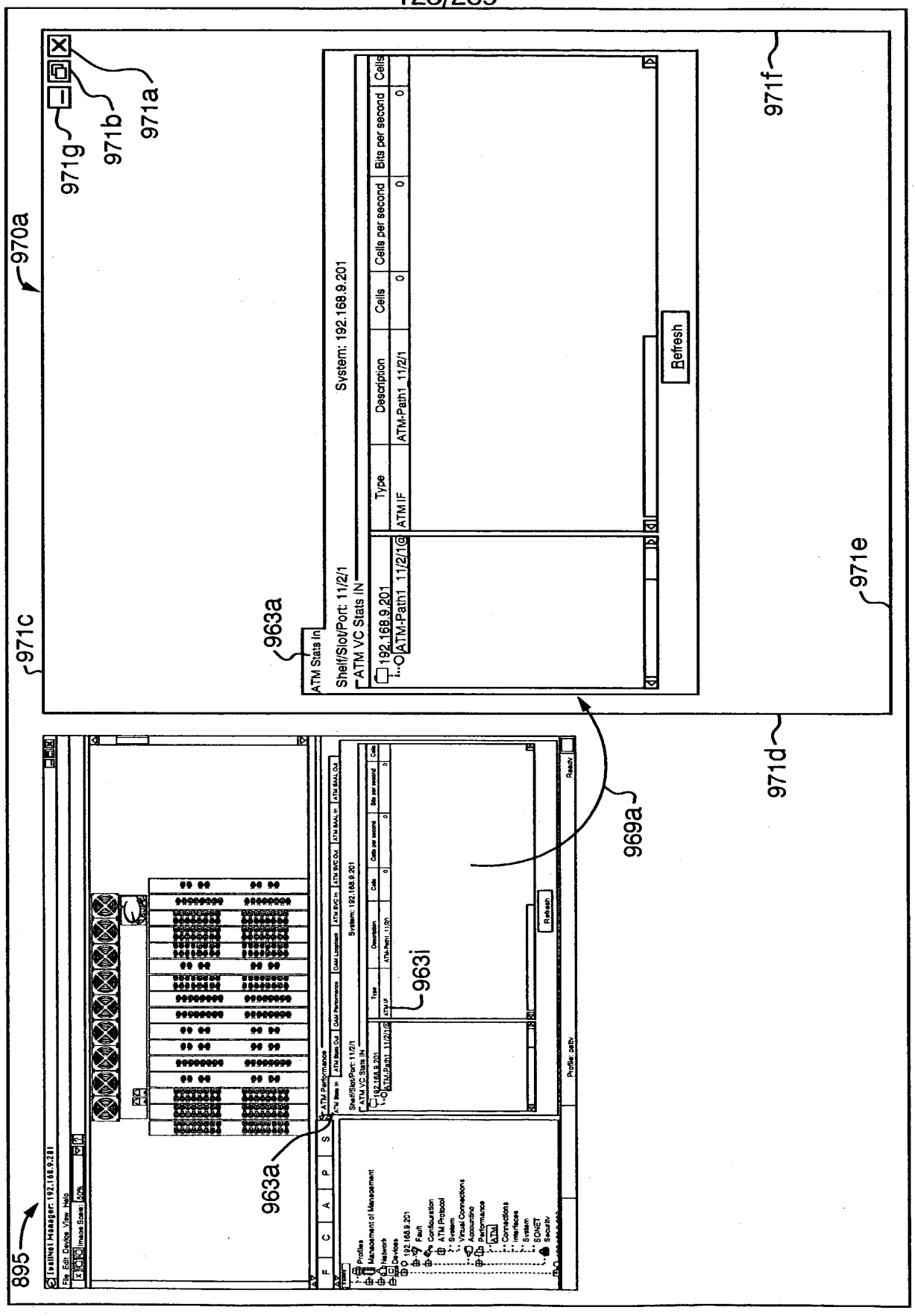

895
963a
963i
969a
971a
971b
971c
971d
971e
971f
971g
970a
ATM Stats In
Shelf/Slot/Port: 11/2/1
System: 192.168.9.201
ATM VC Stats IN
192.168.9.201
ATM-Path1 11/2/1
Type
Description
Cells
Cells per second
Bits per second
ATM IF
ATM-Path1 11/2/1
Refresh

FIG. 9B

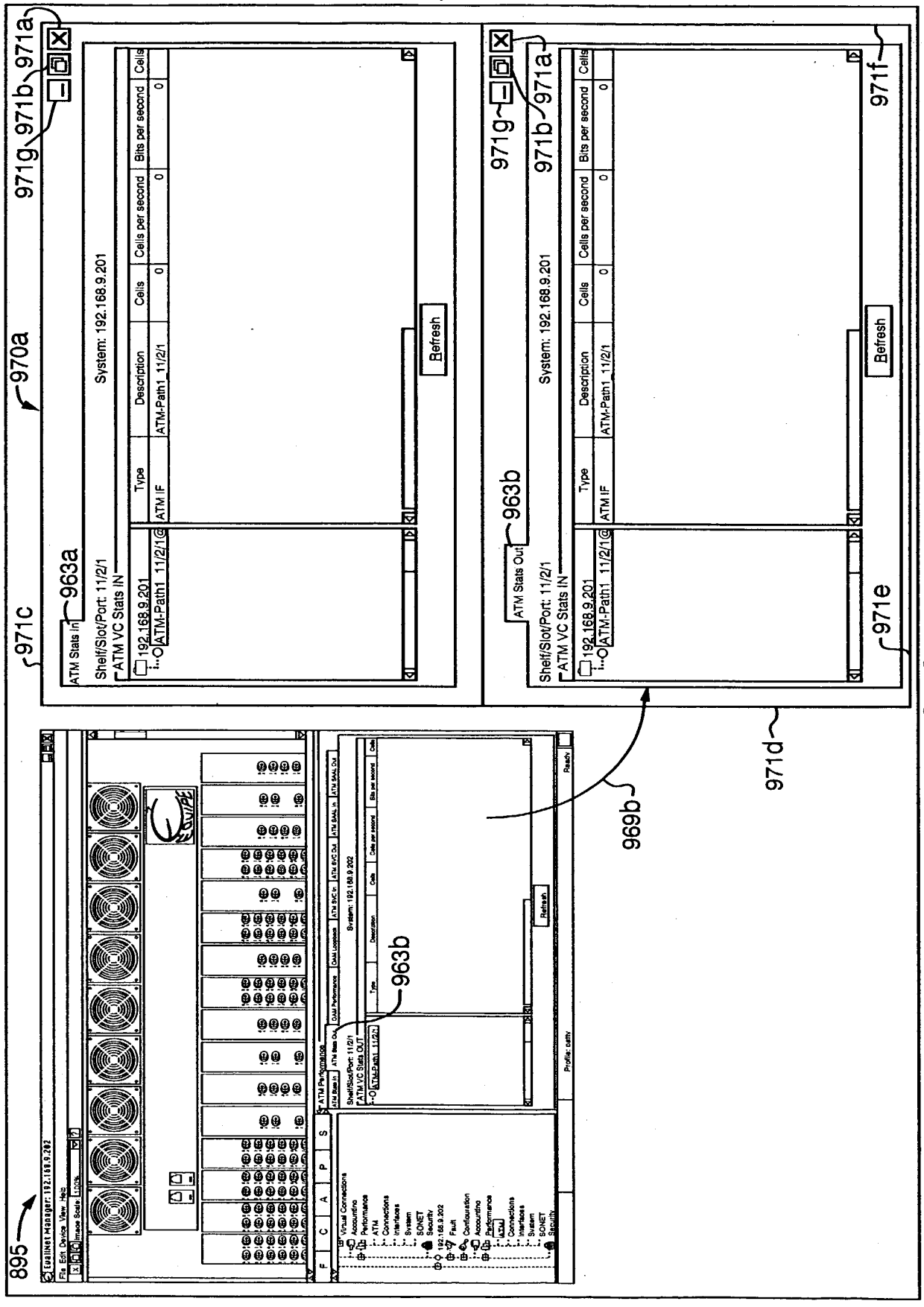

895
971c
970a
971g
971b
971a
963a
ATM Stats In
Shelf/Slot/Port: 11/2/1
ATM VC Stats IN
System: 192.168.9.201
192.168.9.201
ATM-Path1 11/2/1
Type
Description
Cells
Cells per second
Bits per second
ATM IF
ATM-Path1 11/2/1
Refresh
963b
ATM Stats Out
971e
971d
969b
971f

FIG. 9C

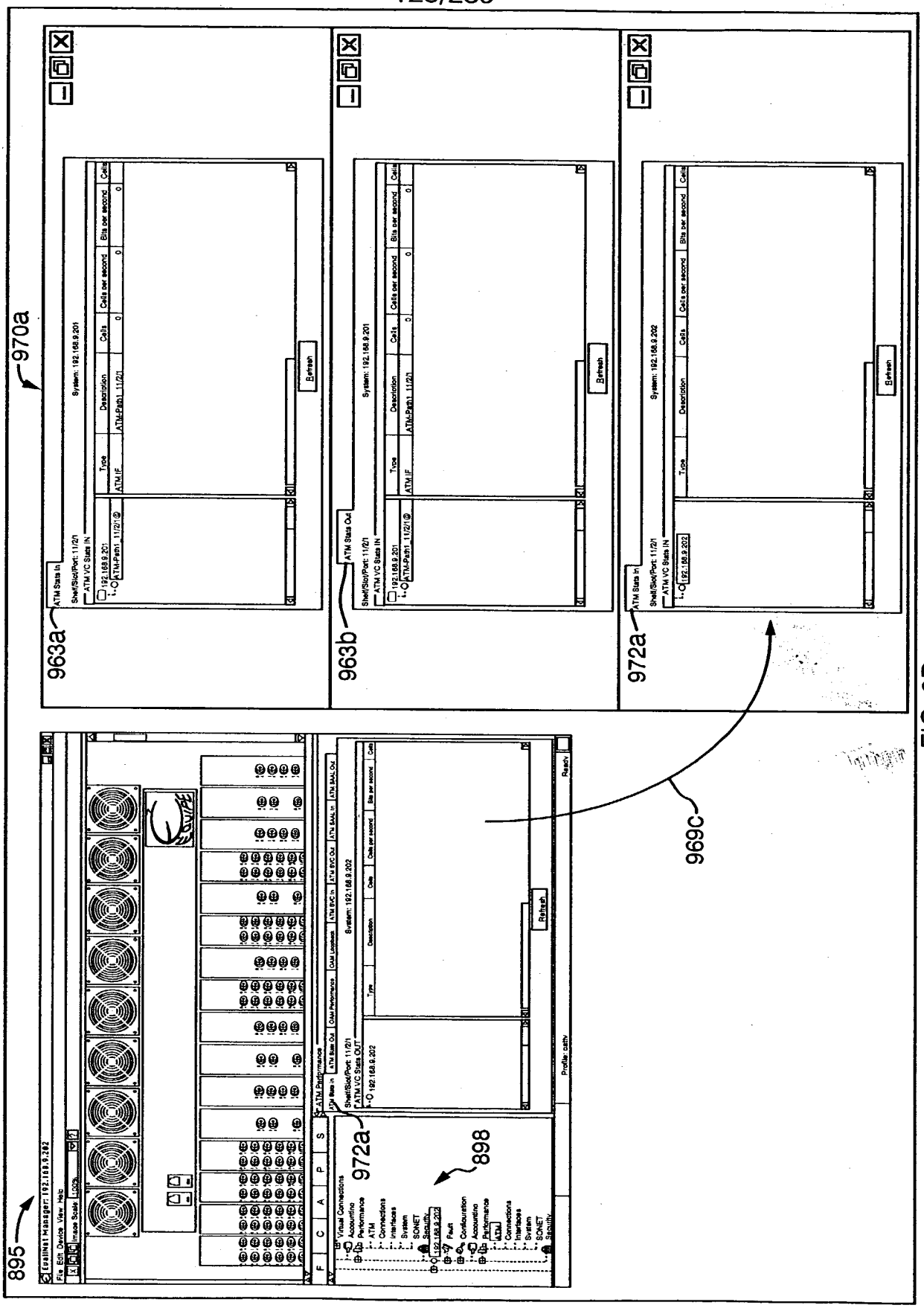


FIG. 9D

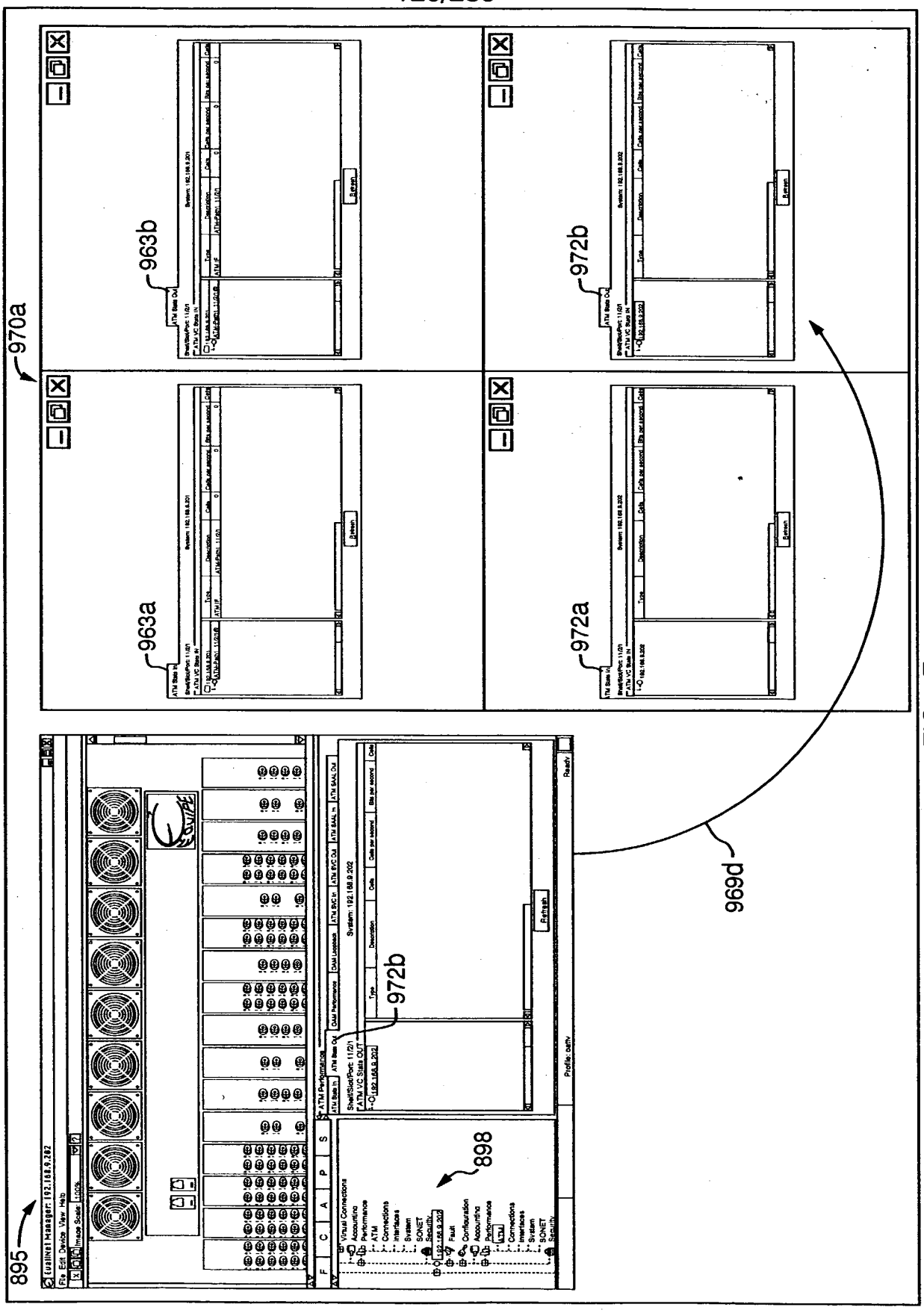


FIG. 9E

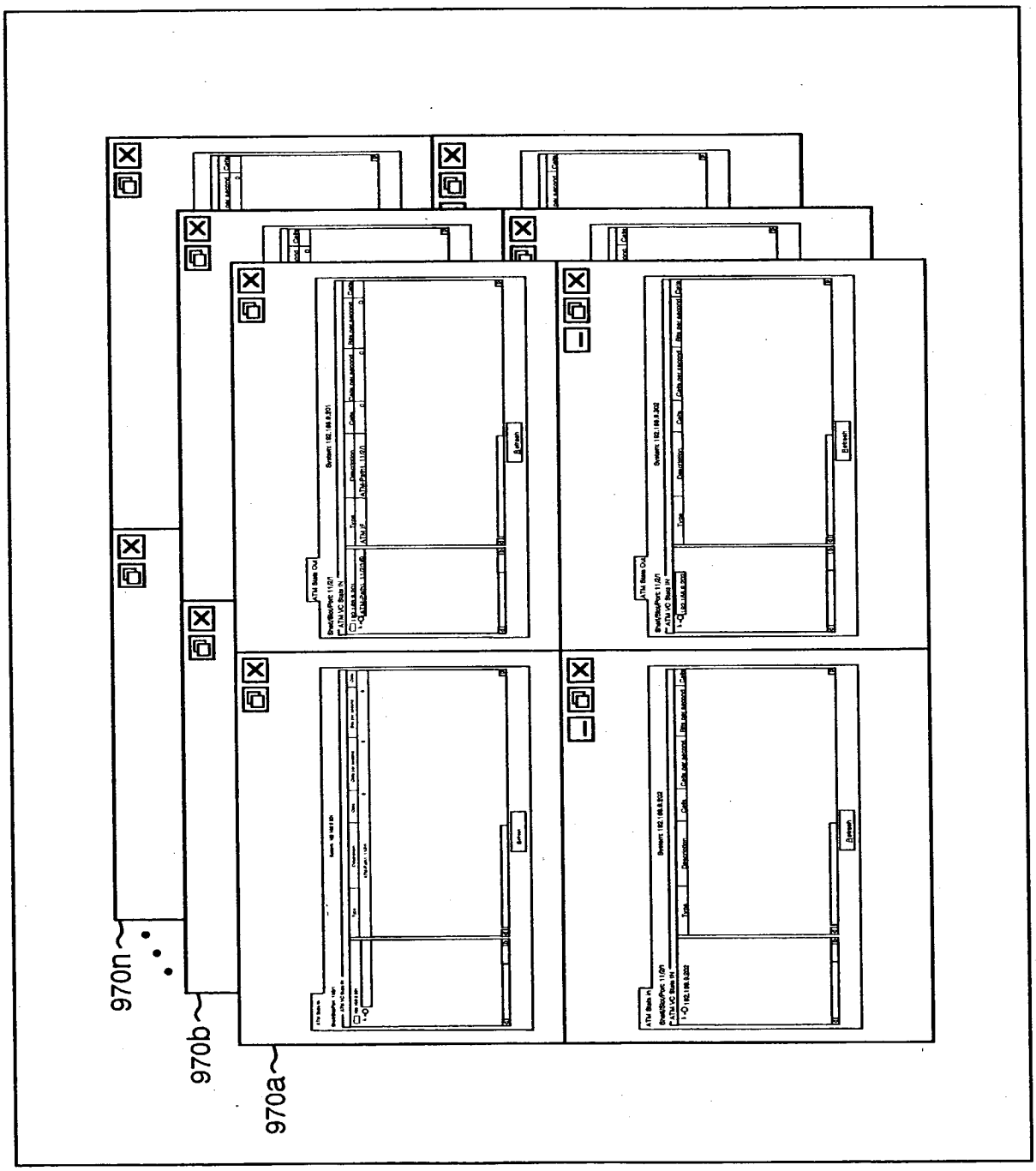


FIG. 9F

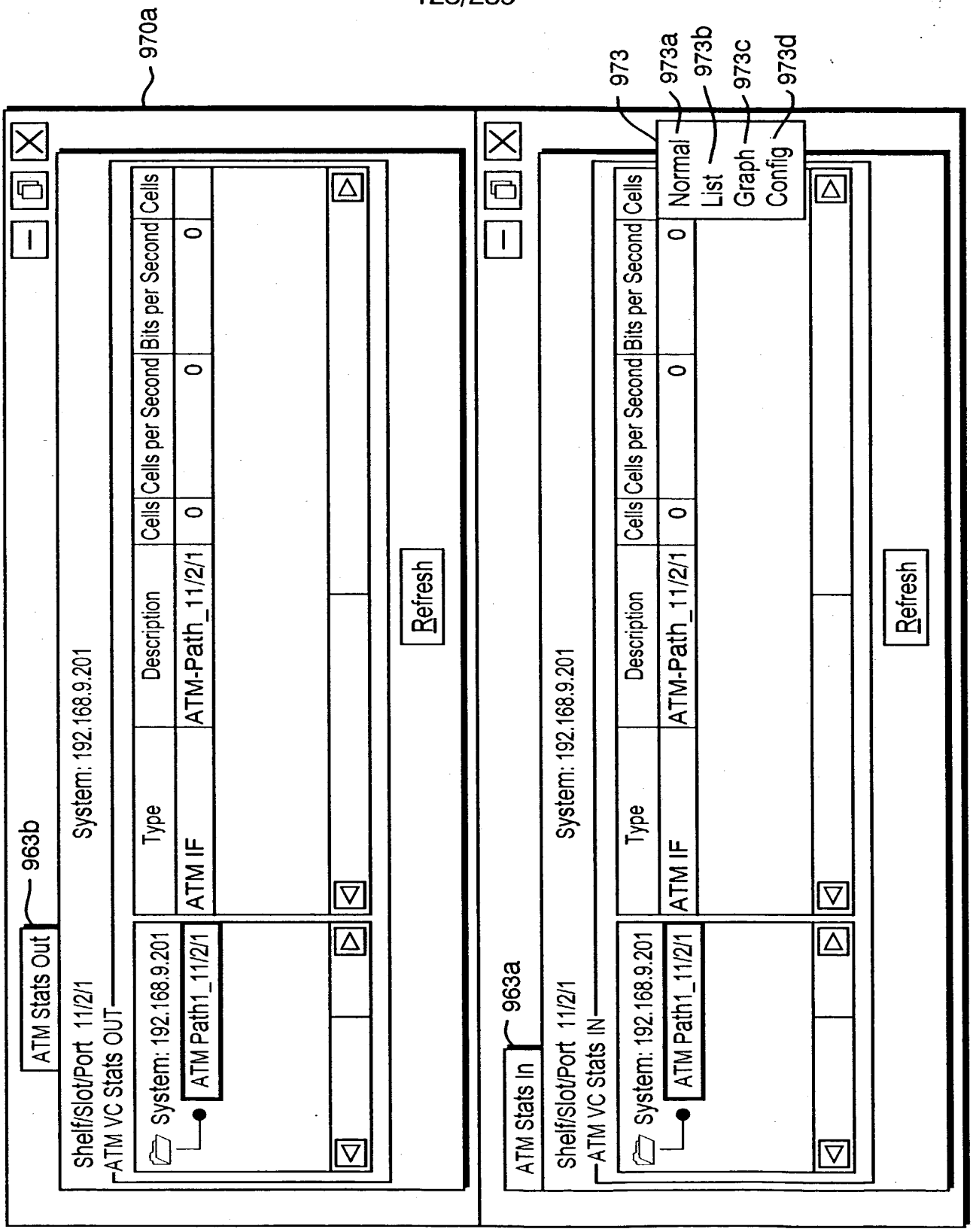

970a
963b
ATM Stats Out
Shelf/Slot/Port 11/2/1
ATM VC Stats OUT
System: 192.168.9.201
System: 192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path_11/2/1
0
0
0
Refresh
973
973a
973b
973c
973d
Normal
List
Graph
Config
963a
ATM Stats In
Shelf/Slot/Port 11/2/1
ATM VC Stats IN
System: 192.168.9.201
System: 192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path_11/2/1
0
0
0
Refresh

FIG. 9G

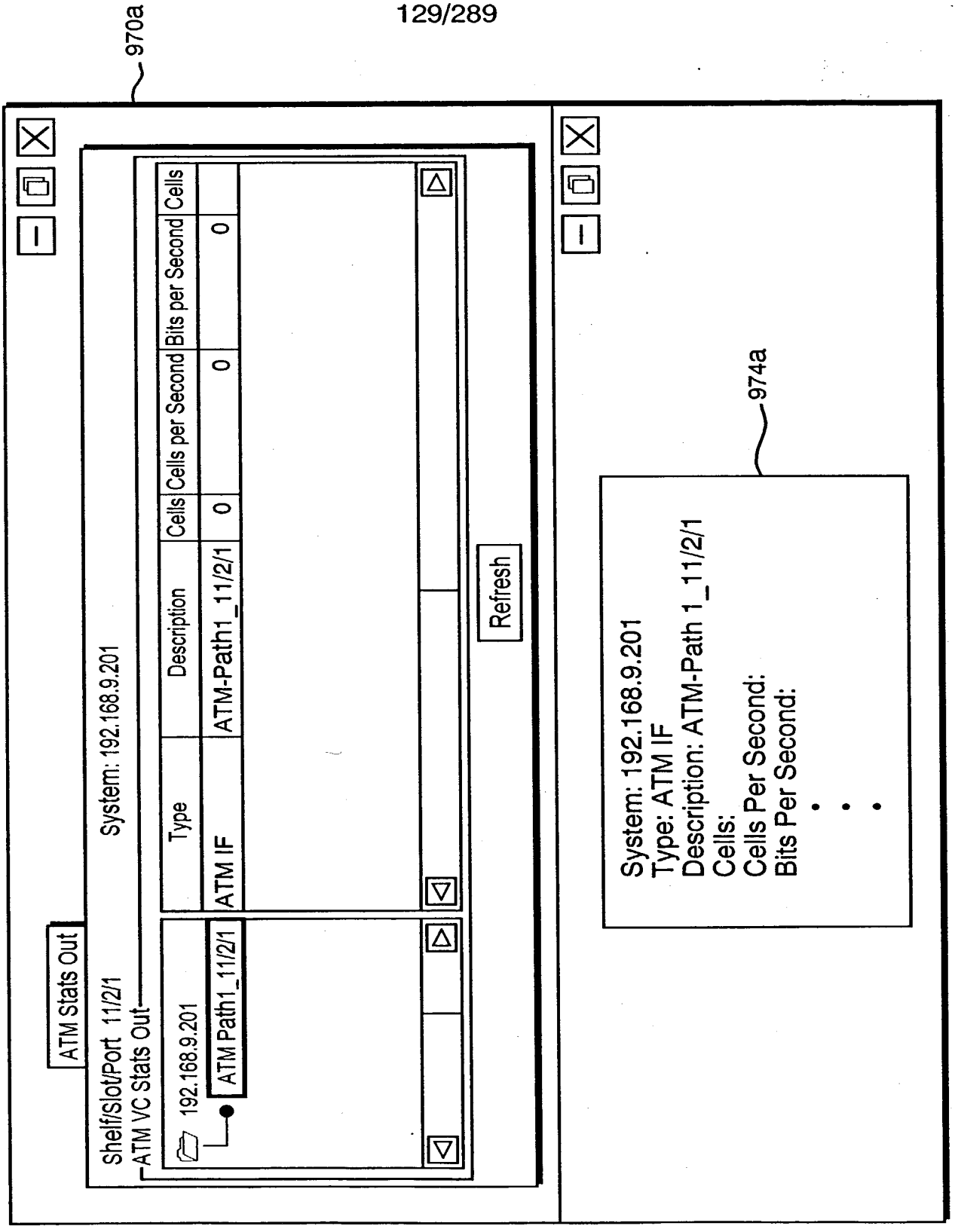

970a
ATM Stats Out
Shelf/Slot/Port 11/2/1
System: 192.168.9.201
ATM VC Stats Out
192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path1_11/2/1
0
0
0
Refresh
974a
System: 192.168.9.201
Type: ATM IF
Description: ATM-Path 1_11/2/1
Cells:
Cells Per Second:
Bits Per Second:

FIG. 9H

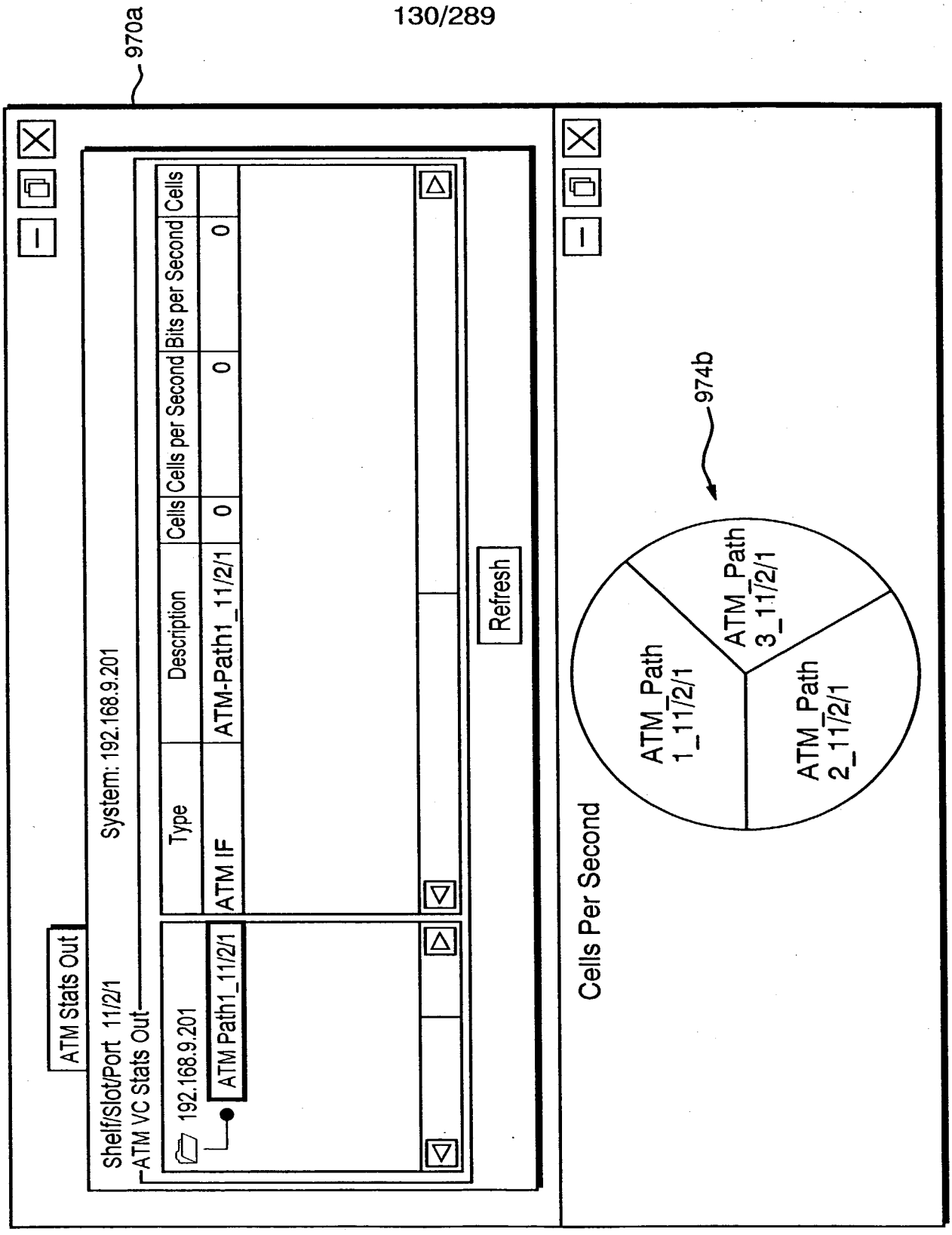

970a
ATM Stats Out
Shelf/Slot/Port 11/2/1
System: 192.168.9.201
ATM VC Stats Out
192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path1_11/2/1
0
0
0
Refresh
974b
Cells Per Second
ATM_Path 1_11/2/1
ATM_Path 3_11/2/1
ATM_Path 2_11/2/1

FIG. 9I

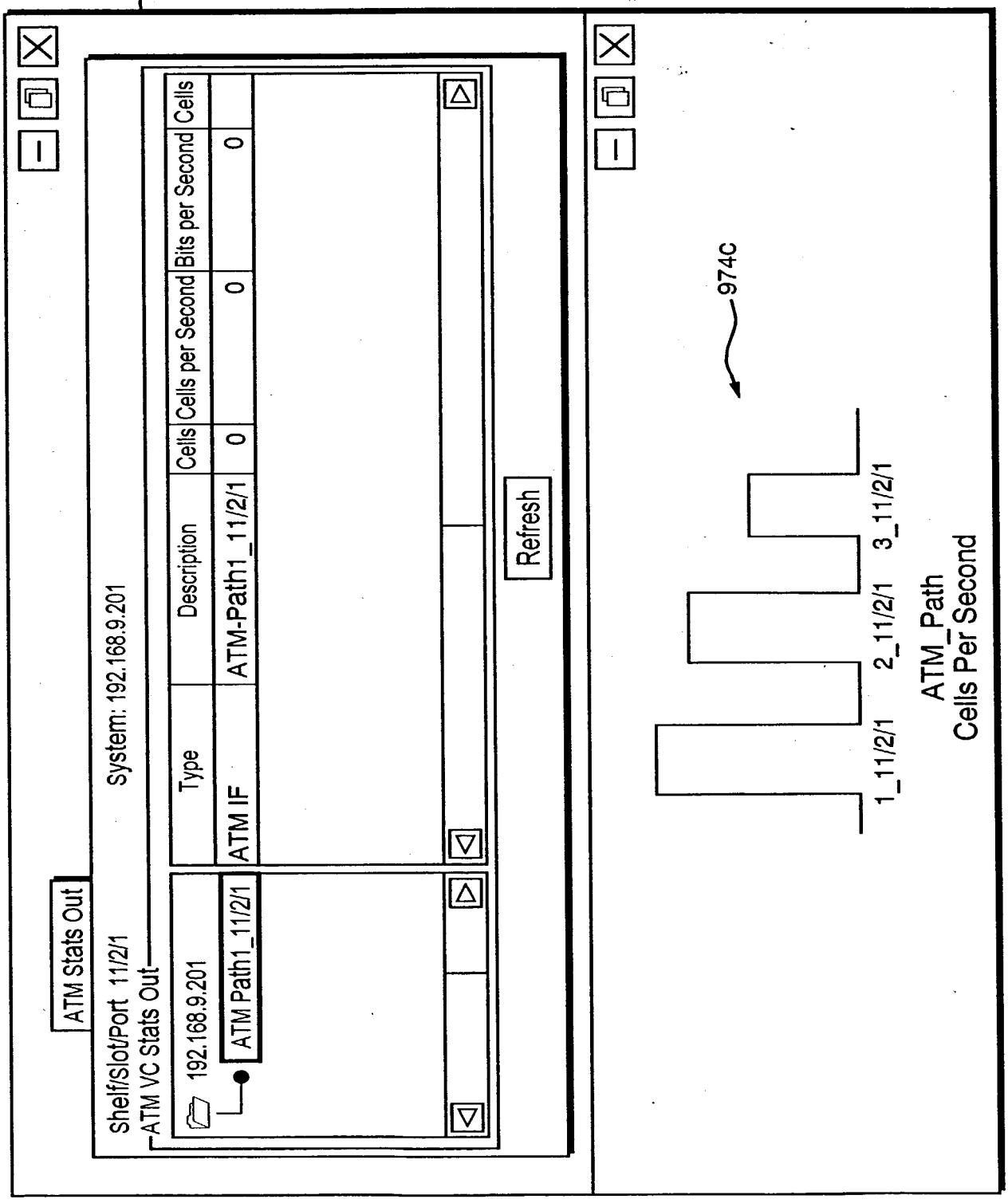

970a
ATM Stats Out
System: 192.168.9.201
Shelf/Slot/Port 11/2/1
ATM VC Stats Out
192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path1_11/2/1
0
0
0
Refresh
974c
1_11/2/1
2_11/2/1
3_11/2/1
ATM_Path
Cells Per Second

FIG. 9J

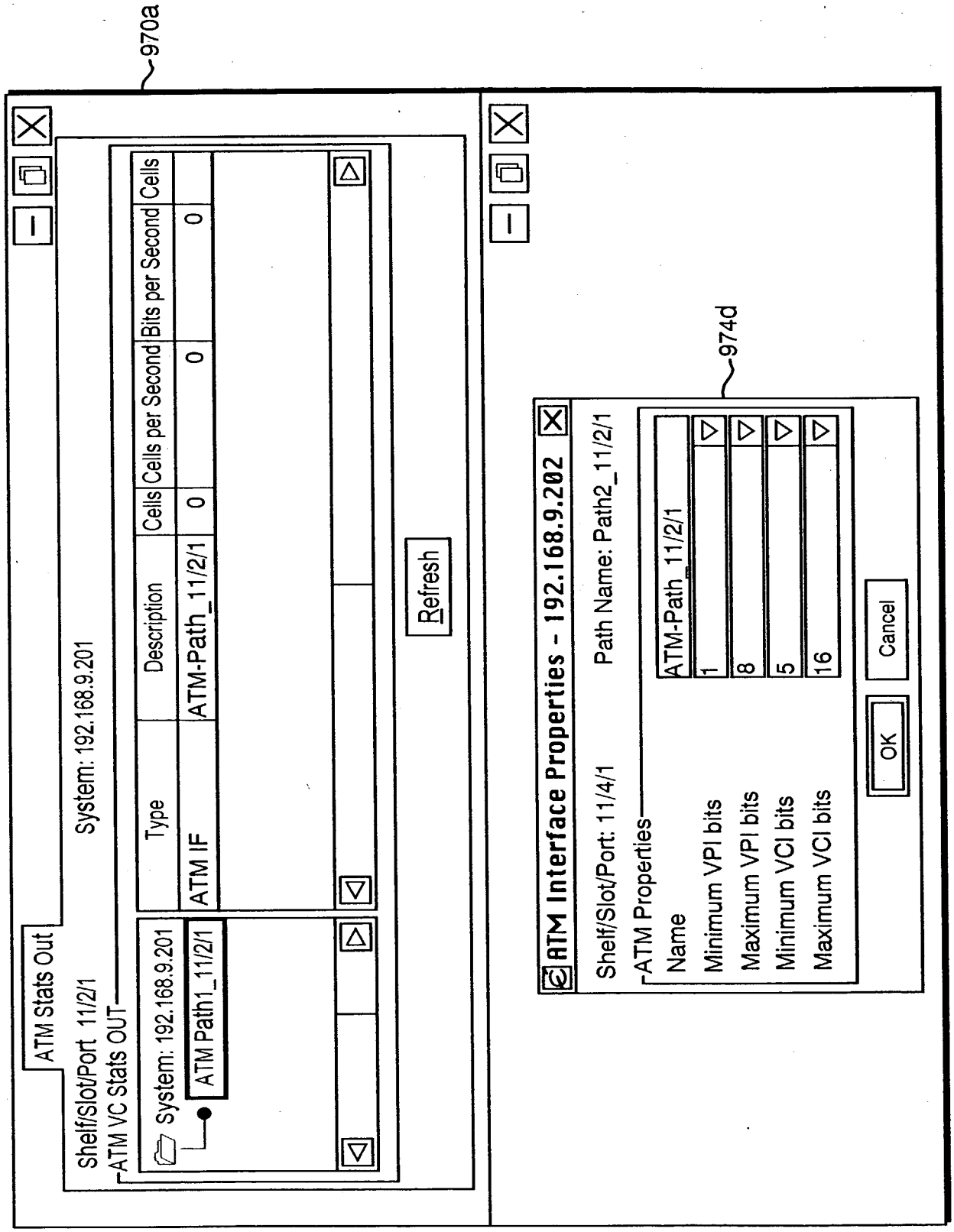

970a
ATM Stats Out
Shelf/Slot/Port 11/2/1
System: 192.168.9.201
ATM VC Stats OUT
System: 192.168.9.201
ATM Path1_11/2/1
Type
Description
Cells
Cells per Second
Bits per Second
Cells
ATM IF
ATM-Path_11/2/1
0
0
0
Refresh
ATM Interface Properties - 192.168.9.202
Shelf/Slot/Port: 11/4/1
Path Name: Path2_11/2/1
974d
ATM Properties
Name
ATM-Path_11/2/1
Minimum VPI bits
1
Maximum VPI bits
8
Minimum VCI bits
5
Maximum VCI bits
16
OK
Cancel

FIG. 9K

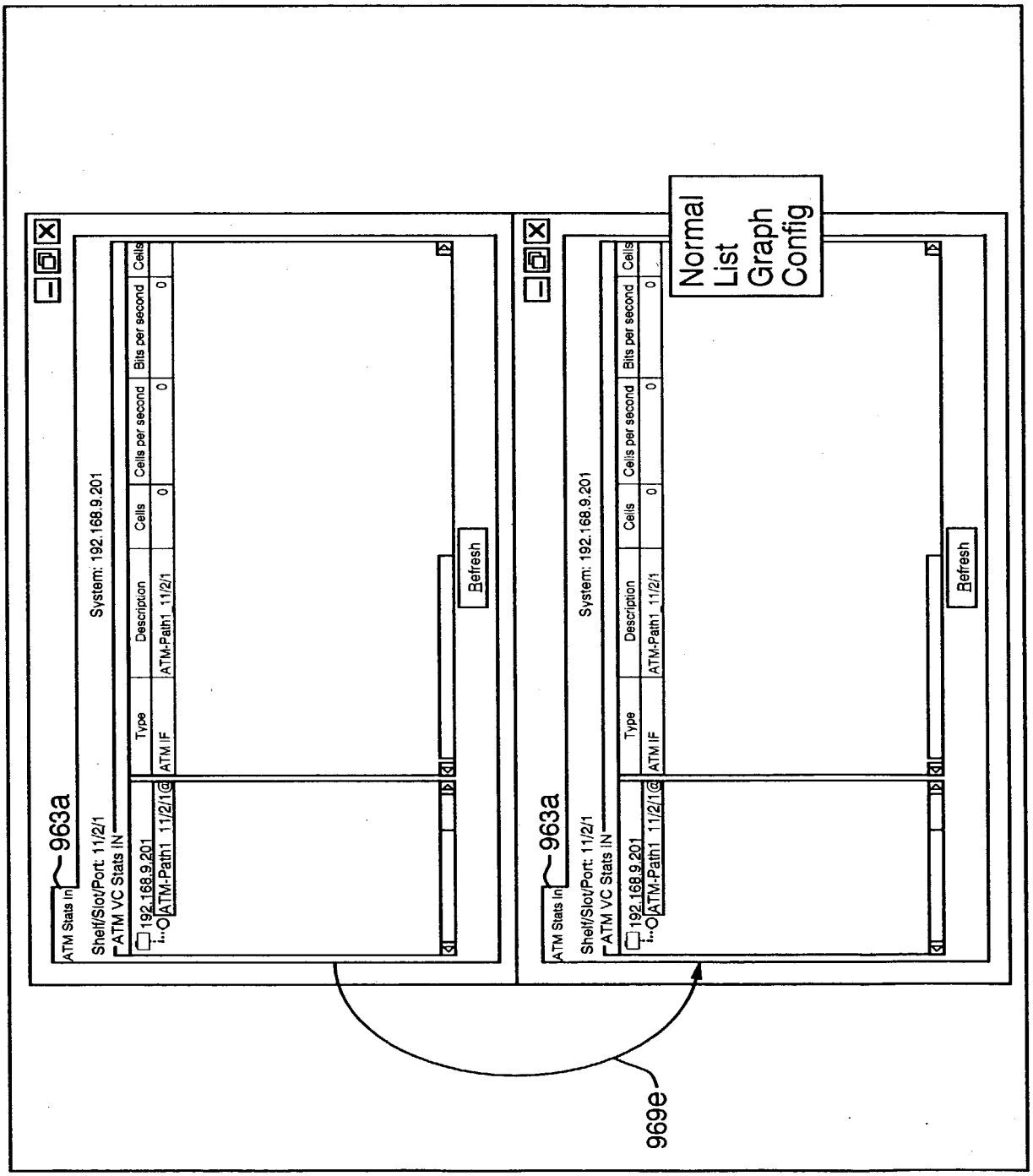

963a
ATM Stats In
Shelf/Slot/Port: 11/2/1
ATM VC Stats IN
System: 192.168.9.201
192.168.9.201
ATM-Path1 11/2/1@
Type
Description
Cells
Cells per second
Bits per second
Cells
ATM IF
ATM-Path1 11/2/1
0
Refresh
Normal
List
Graph
Config
969e

FIG. 9L

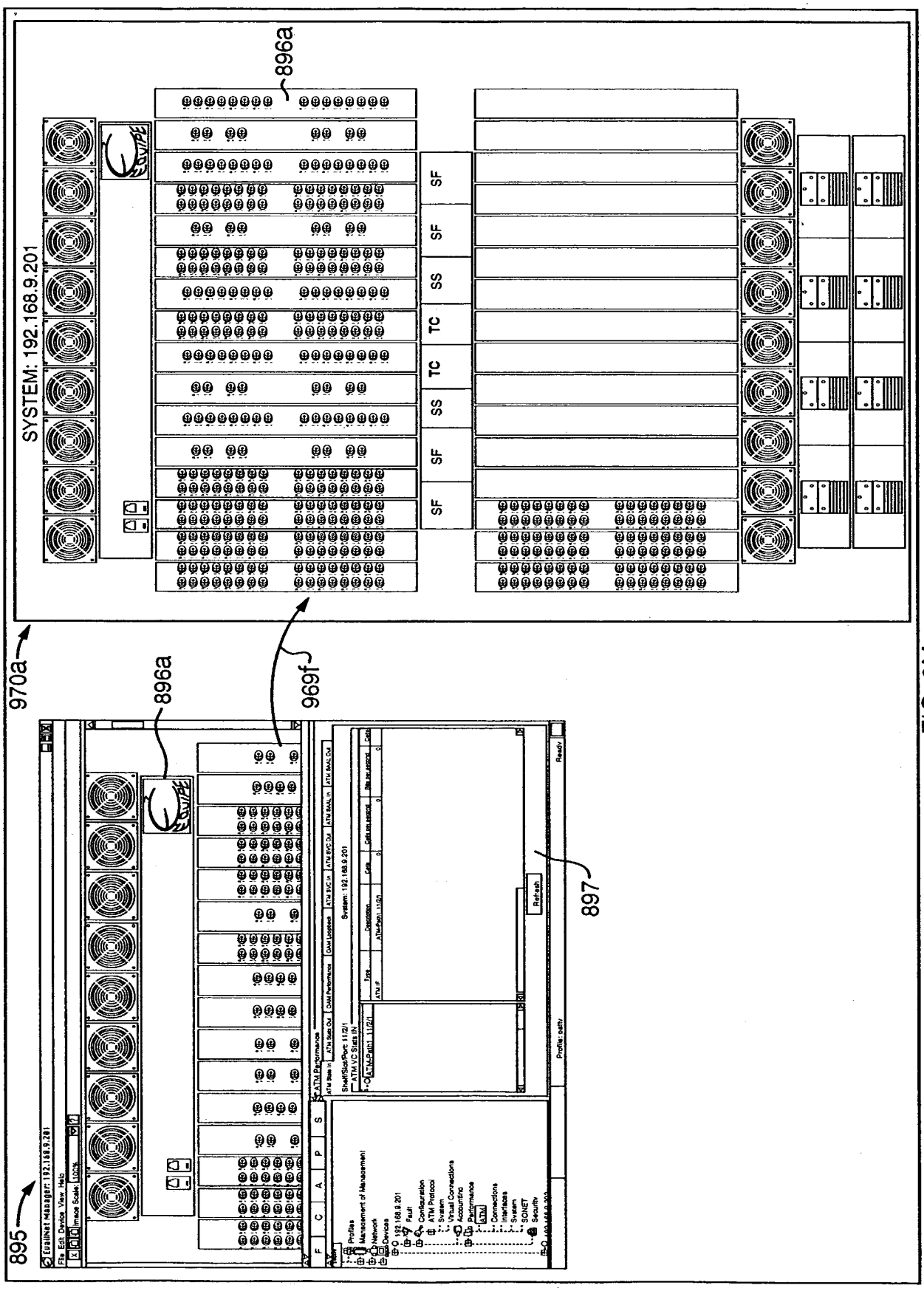

970a
896a
969f
895
897
SYSTEM: 192.168.9.201
SF
SF
SS
TC
TC
SS
SF
SF
Refresh

FIG. 9M

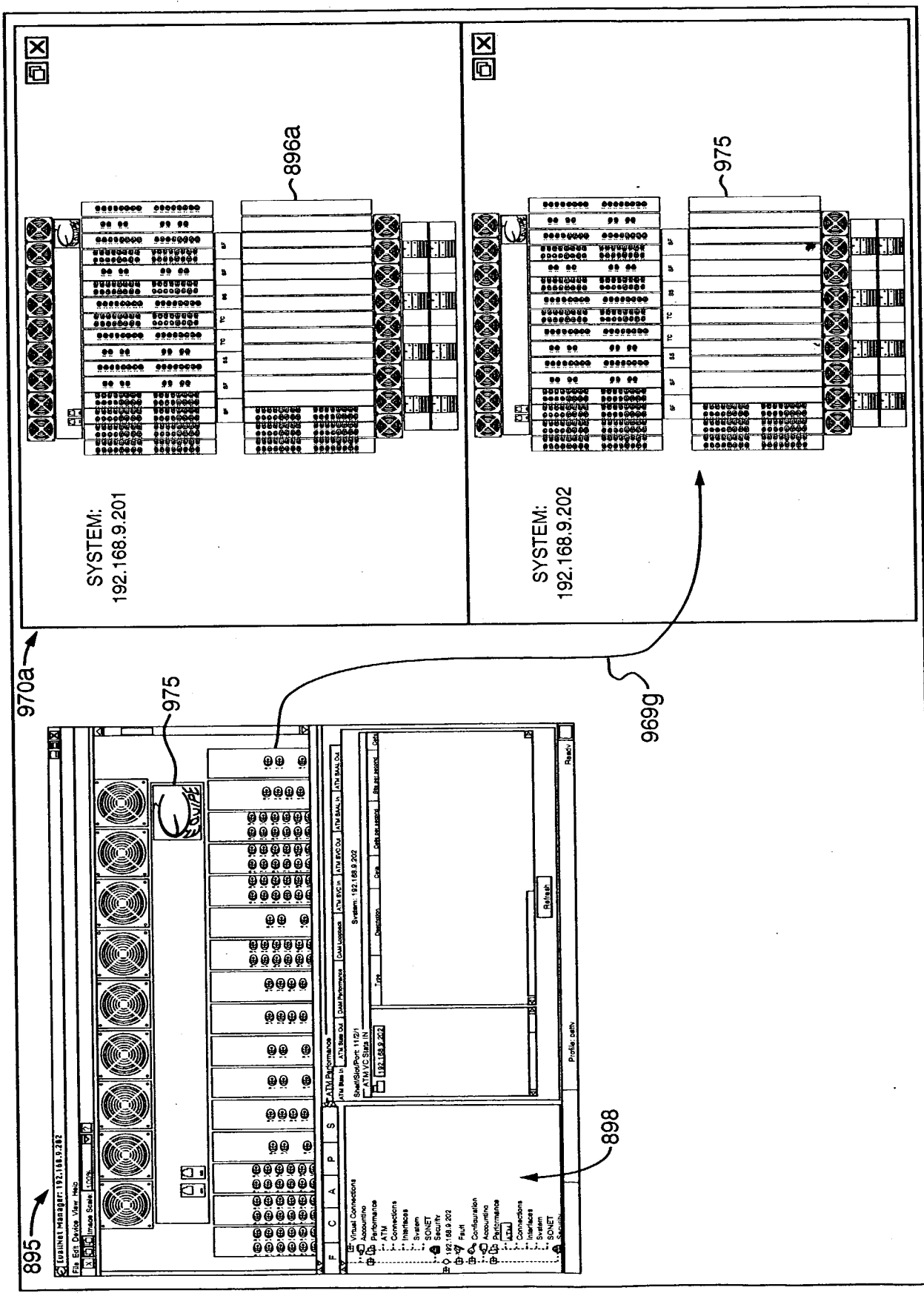

896a
975
SYSTEM:
192.168.9.201
SYSTEM:
192.168.9.202
970a
975
969g
895
898

FIG. 9N

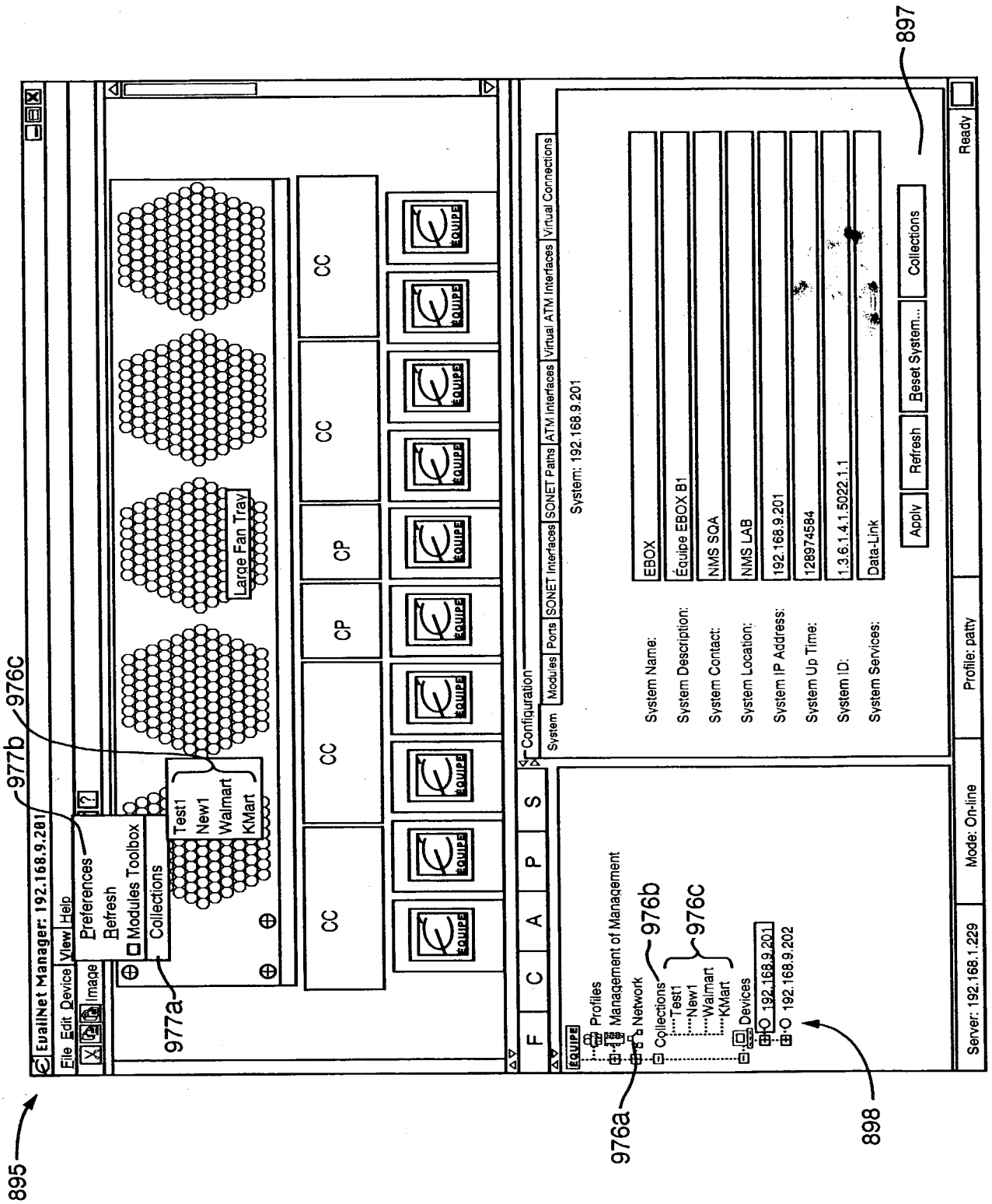

EvaliNet Manager: 192.168.9.201
File Edit Device View Help
Image
Preferences
Refresh
Modules Toolbox
Collections
Test1
New1
Walmart
KMart
Large Fan Tray
CC
CP
EQUIPE
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.201
128974584
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
Collections
F C A P S
Profiles
Management of Management
Network
Collections
Test1
New1
Walmart
KMart
Devices
192.168.9.201
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready
895
897
898
976a
976b
976c
977a
977b

FIG. 10A

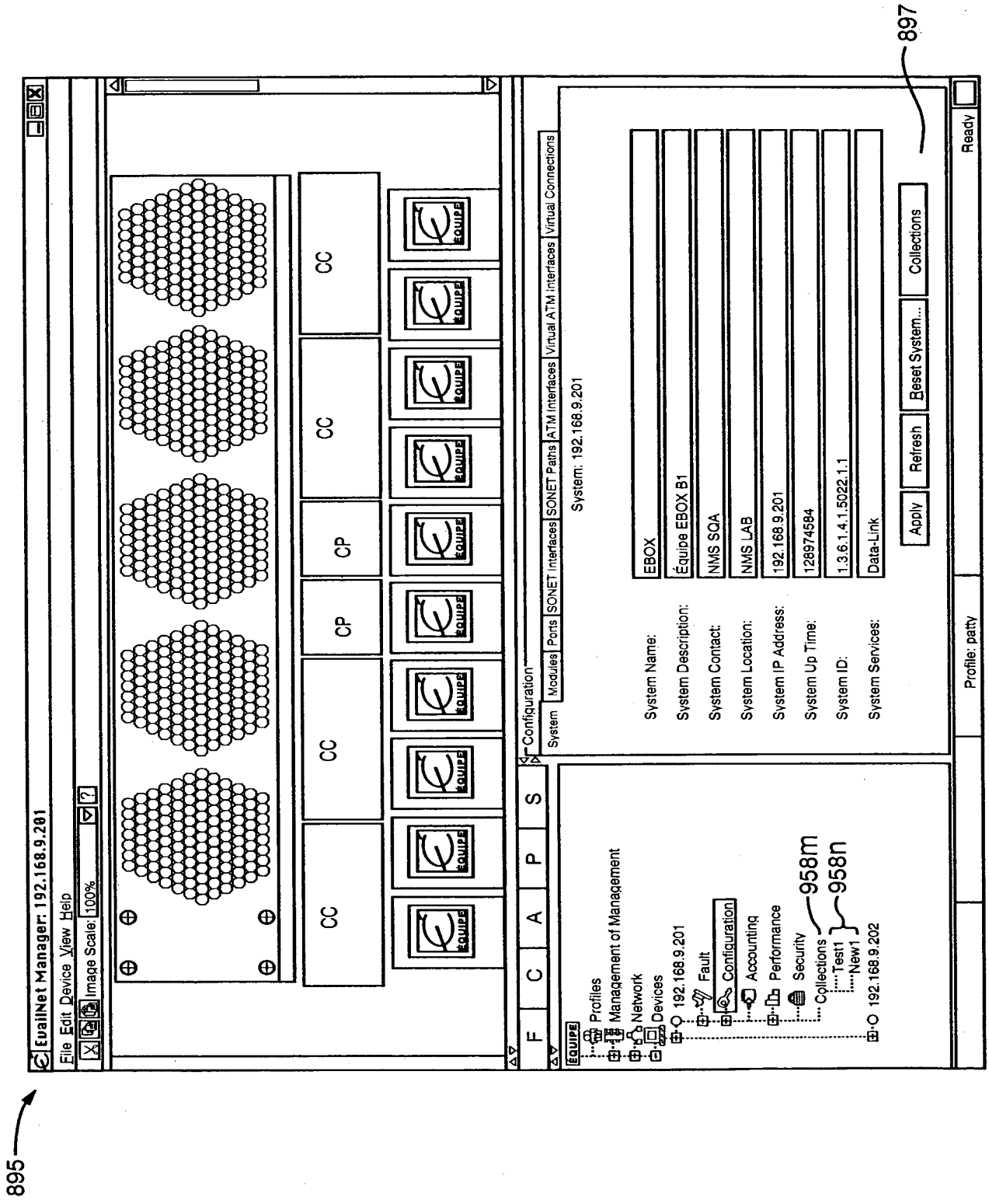

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
F C A P S
Profiles
Management of Management
Network
Devices
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
Collections
Test1
New1
192.168.9.202
958m
958n
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
System Name:
System Description:
System Contact:
System Location:
System IP Address:
System Up Time:
System ID:
System Services:
EBOX
Équipe EBOX B1
NMS SQA
NMS LAB
192.168.9.201
128974584
1.3.6.1.4.1.5022.1.1
Data-Link
Apply
Refresh
Reset System...
Collections
897
Profile: patty
Ready

FIG. 10B

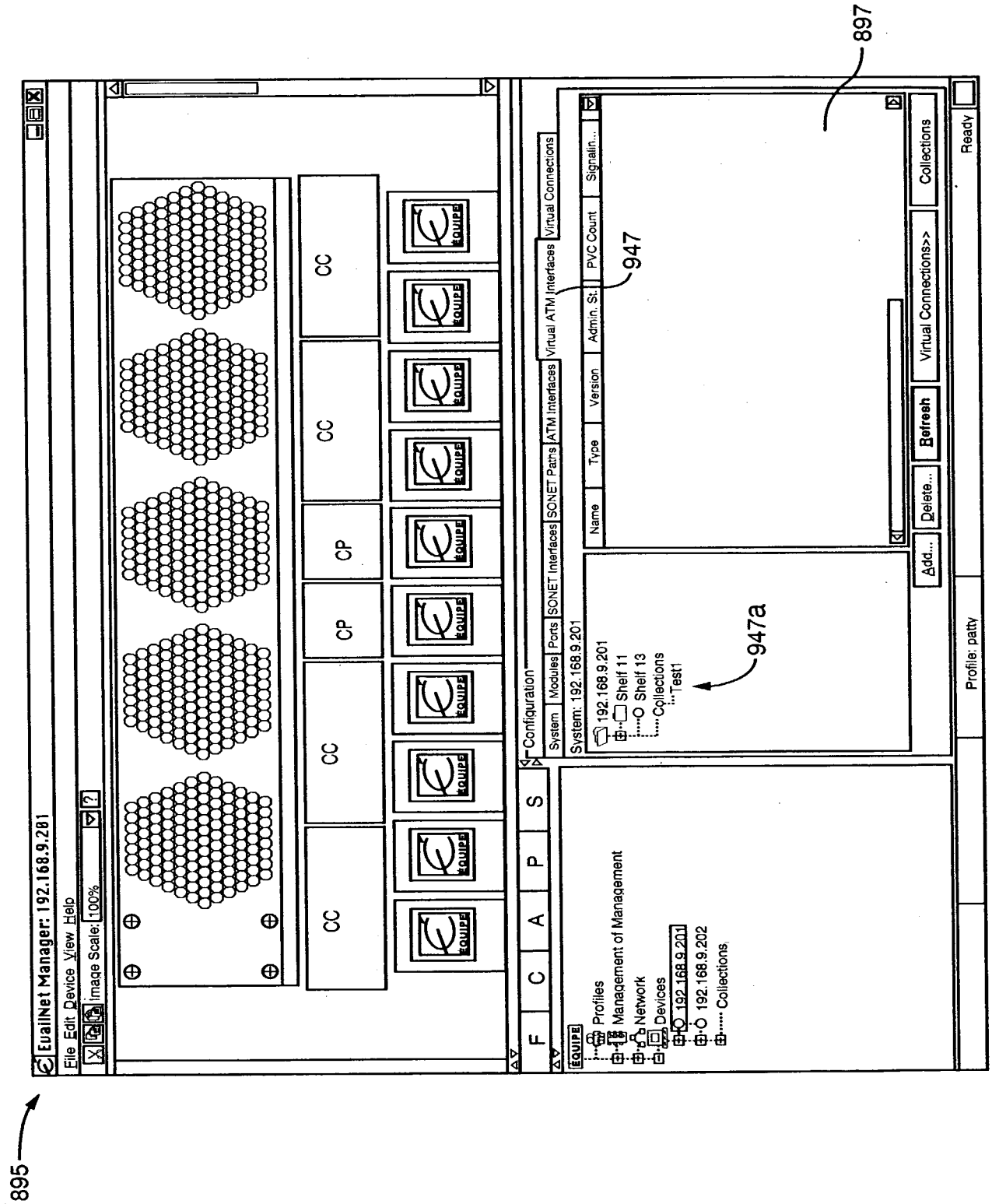

895
897
947
947a
EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
192.168.9.201
Shelf 11
Shelf 13
Collections
Test1
Name Type Version Admin. St. PVC Count Signalin...
Add... Delete... Refresh Virtual Connections>> Collections
Profiles
Management of Management
Network
Devices
192.168.9.201
192.168.9.202
Collections
Profile: patty
Ready

FIG. 10C

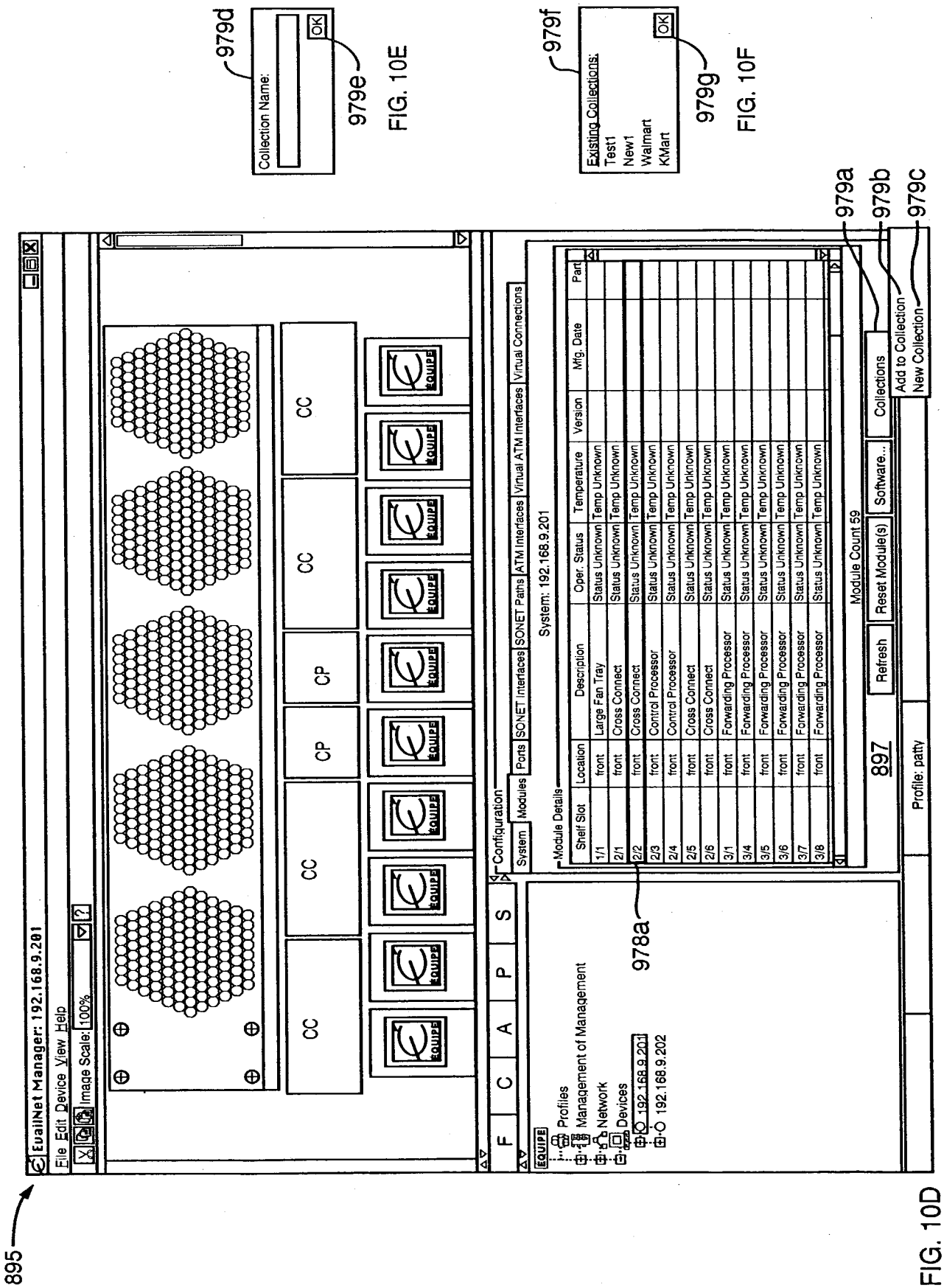


FIG. 10D

FIG. 10E

FIG. 10F

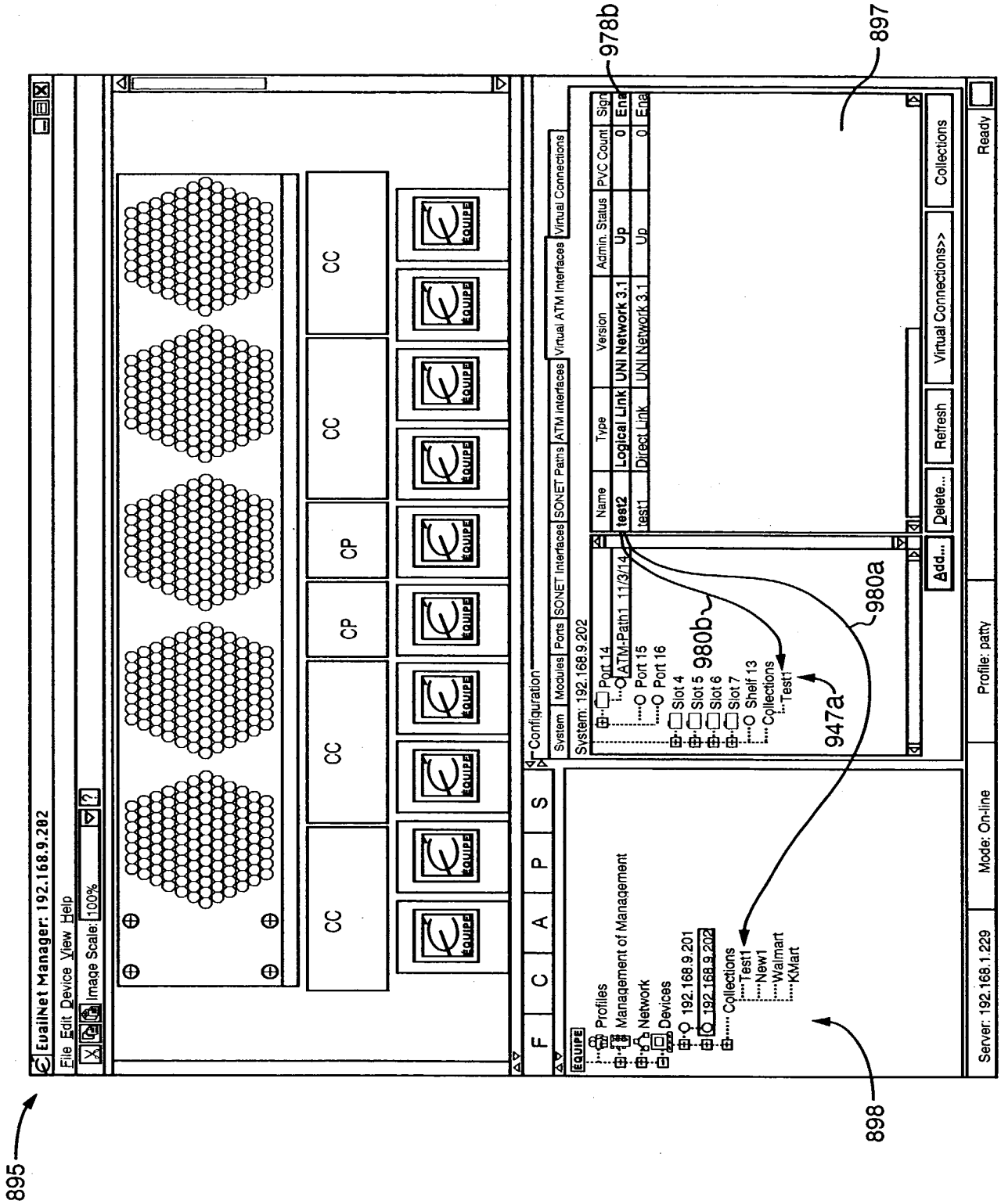

EvalNet Manager: 192.168.9.202
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
Port 14
ATM-Path1 11/3/14
Port 15
Port 16
Slot 4
Slot 5
Slot 6
Slot 7
Shelf 13
Collections
Test1
Name
Type
Version
Admin. Status
PVC Count
test2
Logical Link
UNI Network 3.1
Up
0
test1
Direct Link
UNI Network 3.1
Up
0
Add...
Delete...
Refresh
Virtual Connections>>
Collections
Profiles
Management of Management
Network
Devices
192.168.9.201
192.168.9.202
Collections
Test1
New1
Walmart
KMart
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready
895
898
897
978b
980a
980b
947a

FIG. 10G

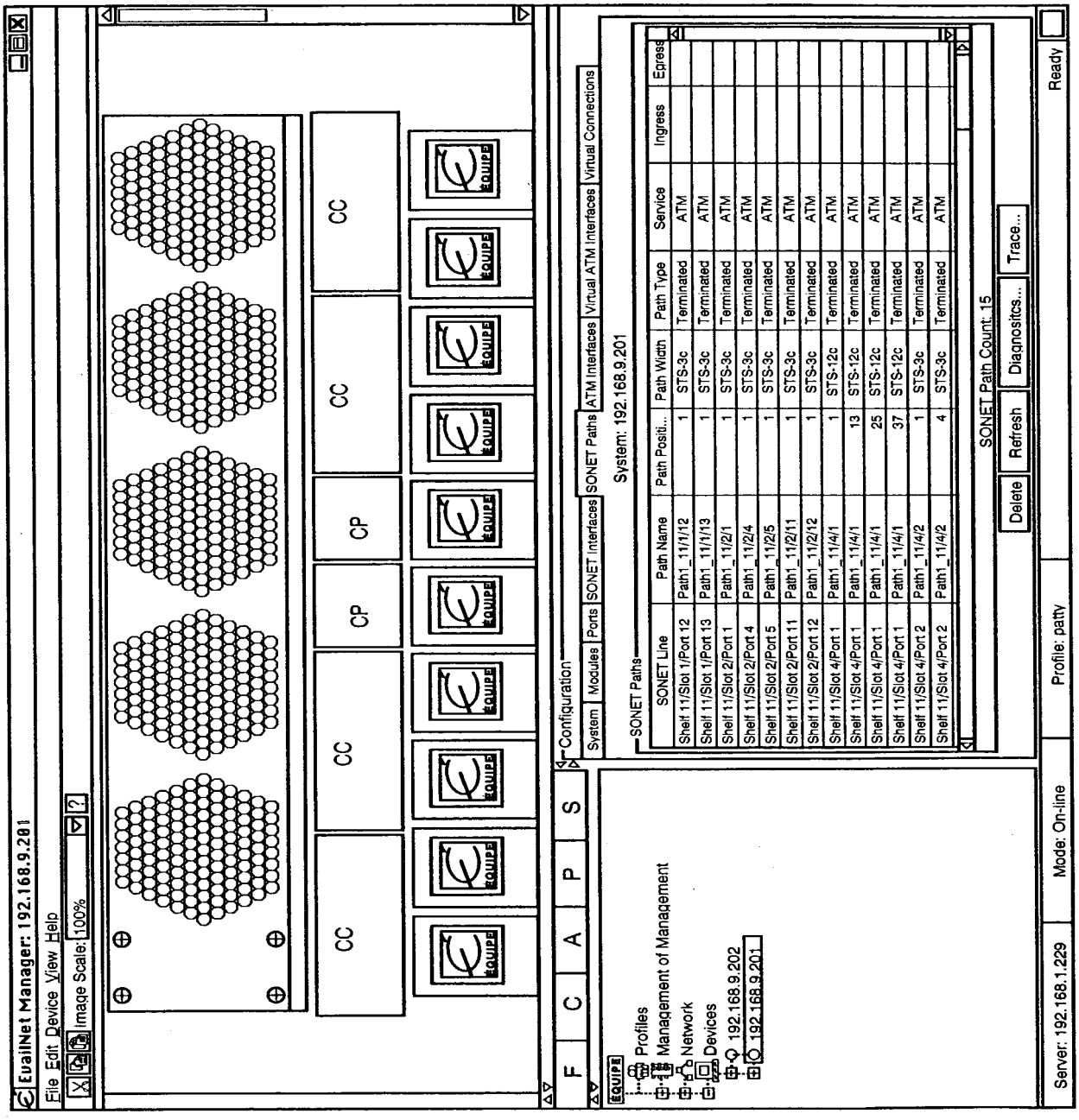

EvalNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
EQUIPE
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
SONET Paths
System: 192.168.9.201
SONET Line | Path Name | Path Positi... | Path Width | Path Type | Service | Ingress | Egress
Shelf 11/Slot 1/Port 12 | Path1_11/1/12 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 1/Port 13 | Path1_11/1/13 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 2/Port 1 | Path1_11/2/1 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 2/Port 4 | Path1_11/2/4 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 2/Port 5 | Path1_11/2/5 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 2/Port 11 | Path1_11/2/11 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 2/Port 12 | Path1_11/2/12 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 4/Port 1 | Path1_11/4/1 | 1 | STS-12c | Terminated | ATM
Shelf 11/Slot 4/Port 1 | Path1_11/4/1 | 13 | STS-12c | Terminated | ATM
Shelf 11/Slot 4/Port 1 | Path1_11/4/1 | 25 | STS-12c | Terminated | ATM
Shelf 11/Slot 4/Port 1 | Path1_11/4/1 | 37 | STS-12c | Terminated | ATM
Shelf 11/Slot 4/Port 2 | Path1_11/4/2 | 1 | STS-3c | Terminated | ATM
Shelf 11/Slot 4/Port 2 | Path1_11/4/2 | 4 | STS-3c | Terminated | ATM
SONET Path Count: 15
Delete
Refresh
Diagnositcs...
Trace...
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 10H

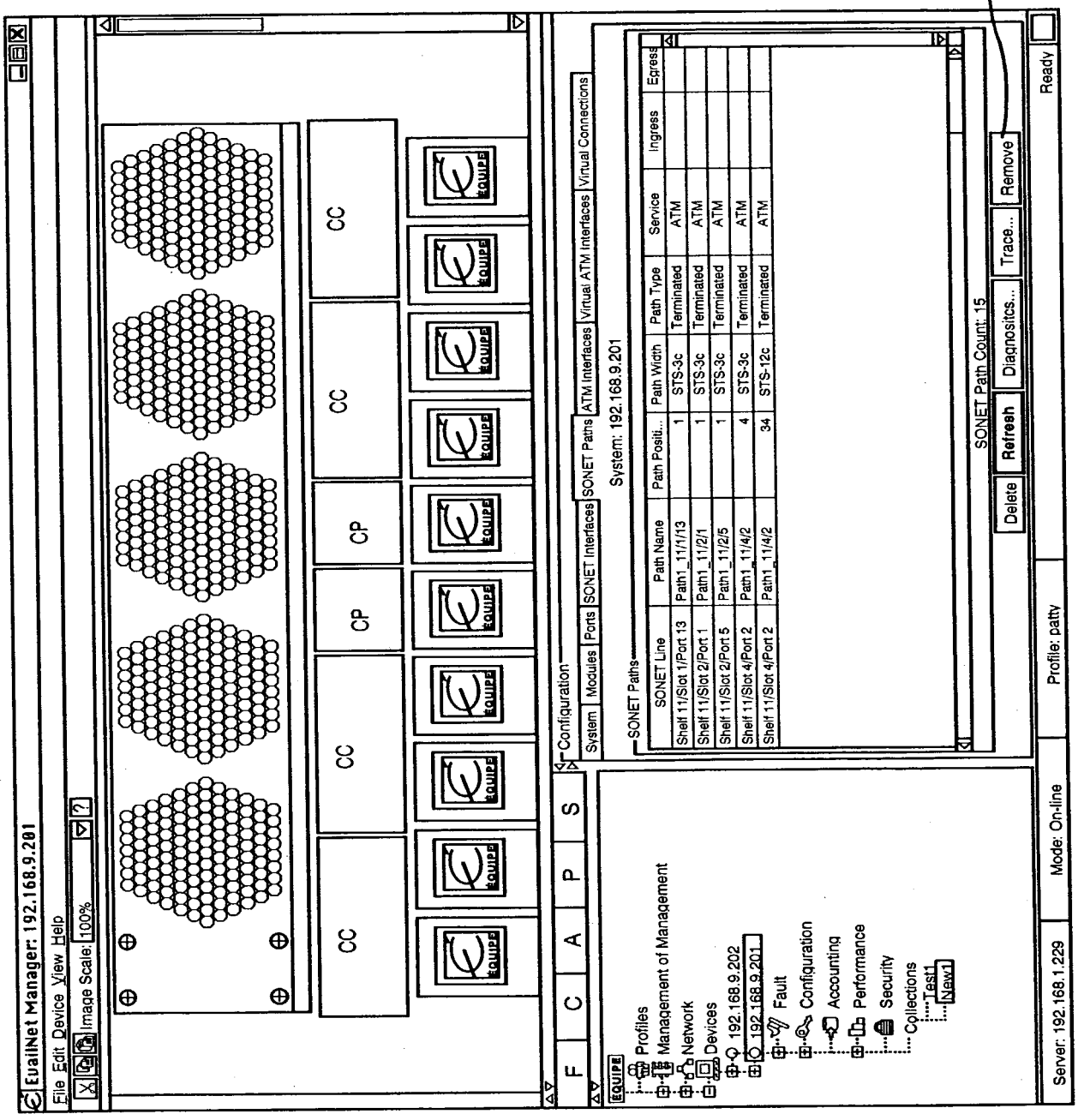

EvailNet Manager: 192.168.9.201
File Edit Device View Help
Image Scale: 100%
CC
CP
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.201
SONET Paths
SONET Line
Path Name
Path Posiii...
Path Width
Path Type
Service
Ingress
Egress
Shelf 11/Slot 1/Port 13
Path1_11/1/13
STS-3c
Terminated
ATM
Shelf 11/Slot 2/Port 1
Path1_11/2/1
Shelf 11/Slot 2/Port 5
Path1_11/2/5
Shelf 11/Slot 4/Port 2
Path1_11/4/2
STS-12c
SONET Path Count: 15
Delete
Refresh
Diagnositcs...
Trace...
Remove
982
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.201
Fault
Configuration
Accounting
Performance
Security
Collections
Test1
New1
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 10I

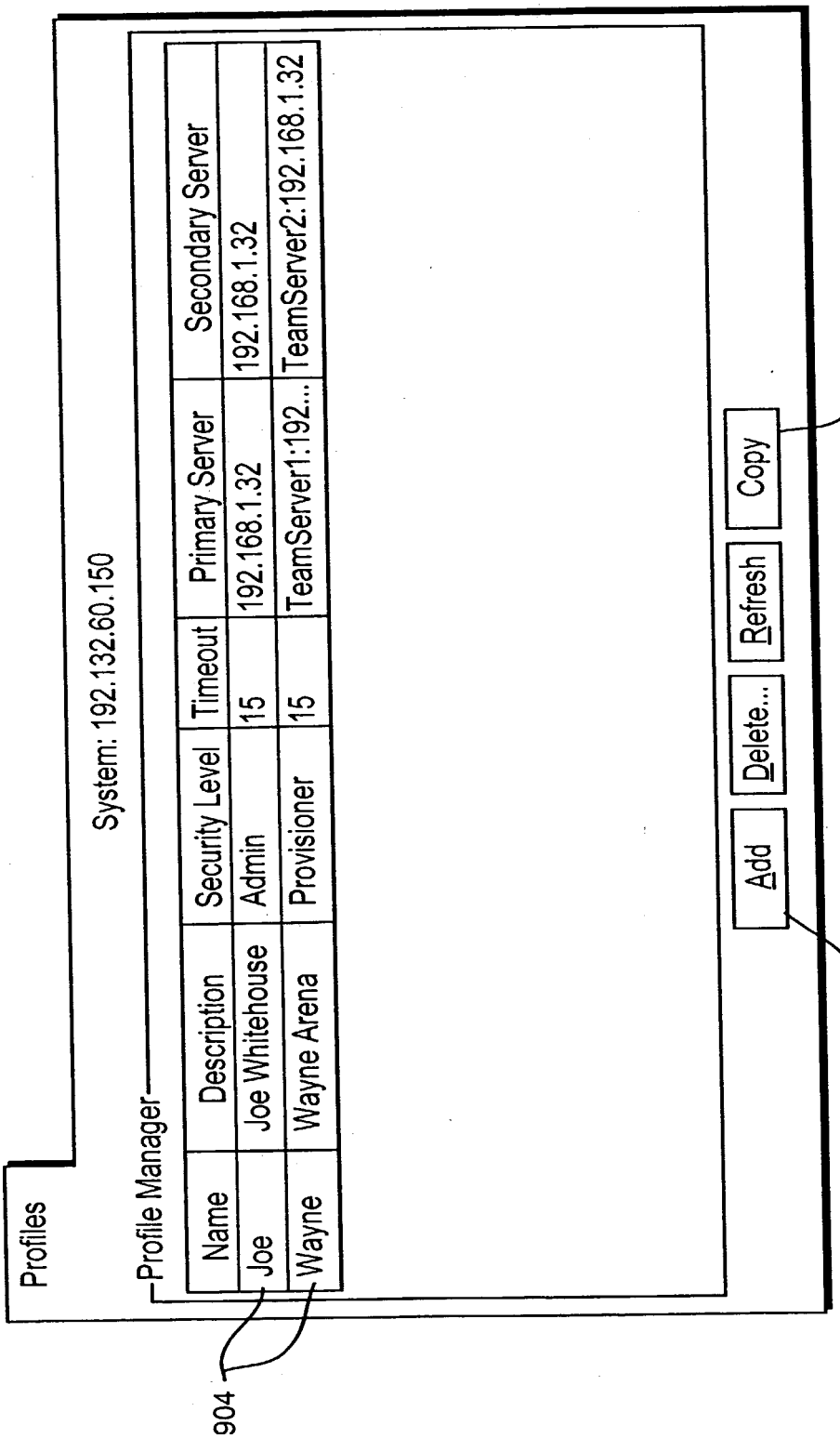

903
Profiles
System: 192.132.60.150
Profile Manager
Name
Description
Security Level
Timeout
Primary Server
Secondary Server
Joe
Joe Whitehouse
Admin
15
192.168.1.32
192.168.1.32
Wayne
Wayne Arena
Provisioner
15
TeamServer1:192...
TeamServer2:192.168.1.32
904
Add
Delete...
Refresh
Copy
905
906

FIG. 11A

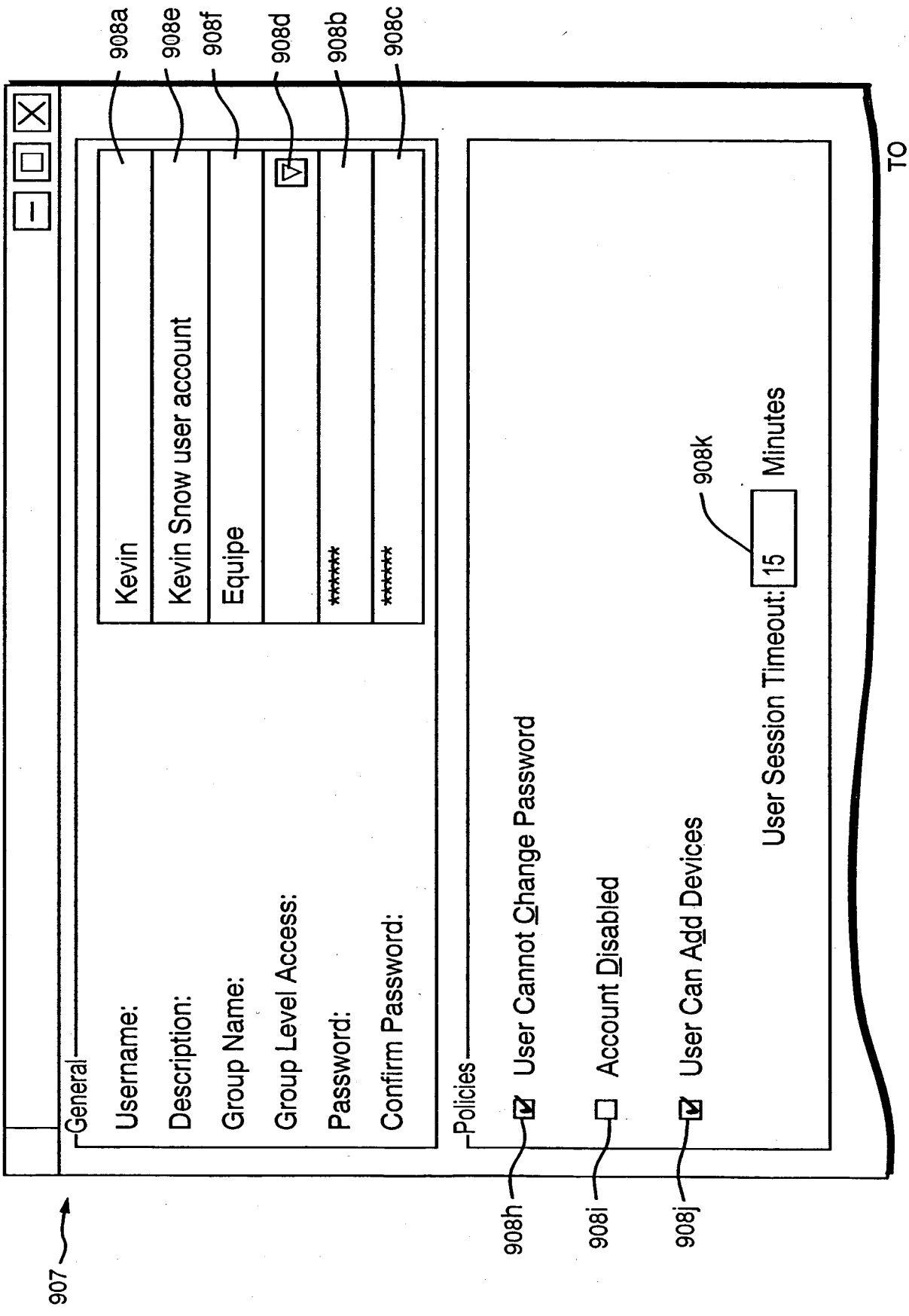

907
908a
908e
908f
908d
908b
908c
General
Username:
Description:
Group Name:
Group Level Access:
Password:
Confirm Password:
Kevin
Kevin Snow user account
Equipe
******
******
Policies
User Cannot Change Password
Account Disabled
User Can Add Devices
User Session Timeout:
15
Minutes
908k
908h
908i
908j
TO
FIG. 11C

FIG. 11B

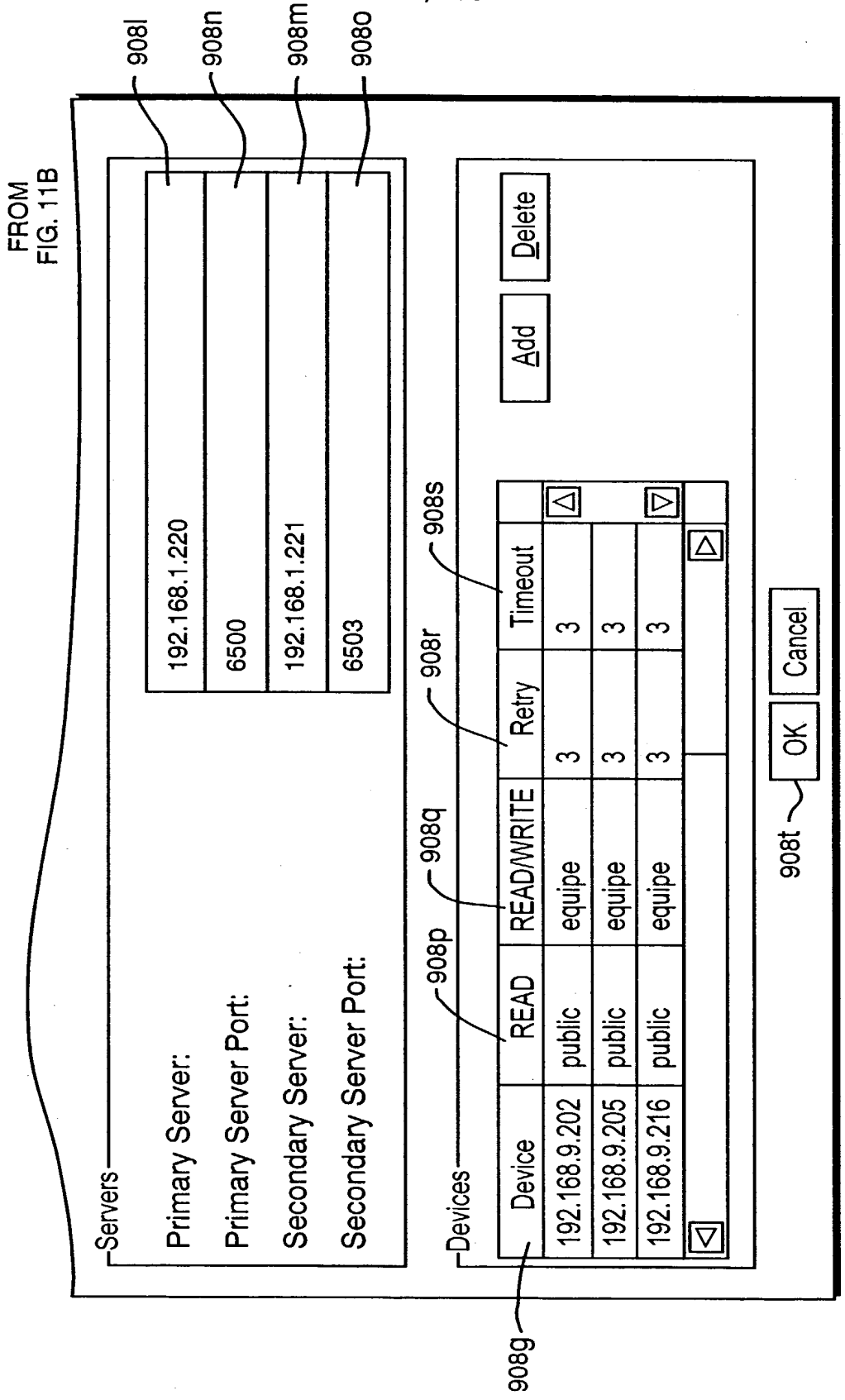

FROM FIG. 11B
908l
908n
908m
908o
Servers
Primary Server:
Primary Server Port:
Secondary Server:
Secondary Server Port:
192.168.1.220
6500
192.168.1.221
6503
Devices
Add
Delete
908s
908r
908q
908p
Device
READ
READ/WRITE
Retry
Timeout
192.168.9.202
192.168.9.205
192.168.9.216
public
equipe
3
OK
Cancel
908t
908g

FIG. 11C

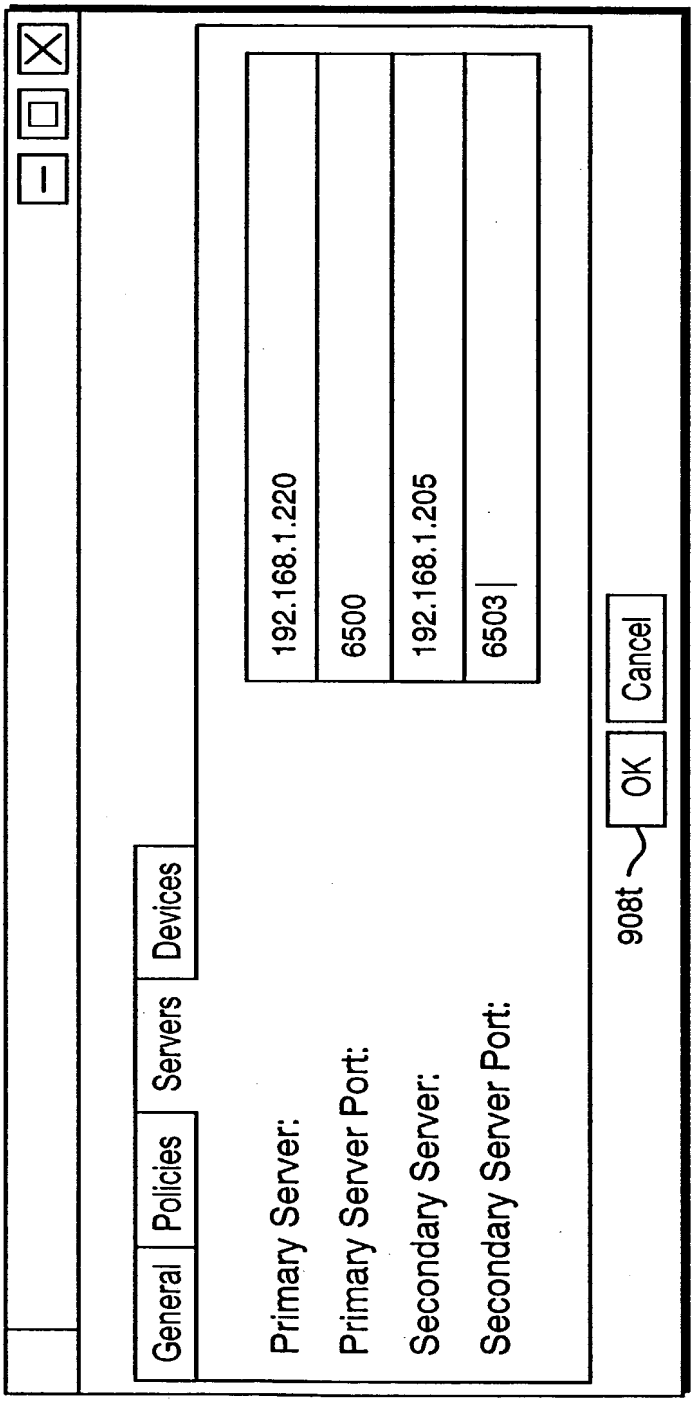

General
Policies
Servers
Devices
Primary Server:
Primary Server Port:
Secondary Server:
Secondary Server Port:
192.168.1.220
6500
192.168.1.205
6503
908t
OK
Cancel

FIG. 11D

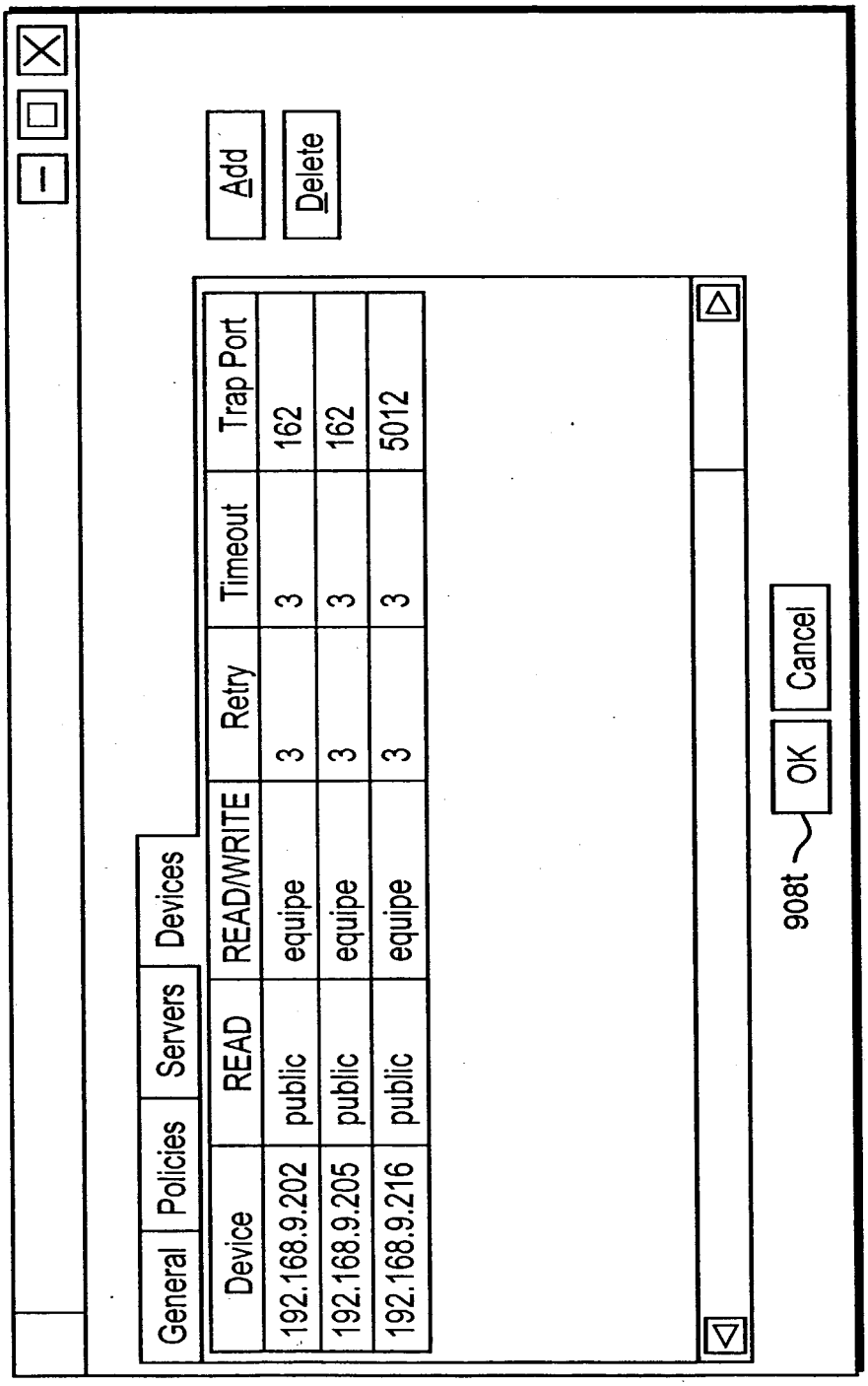

General
Policies
Servers
Devices
Device
READ
READ/WRITE
Retry
Timeout
Trap Port
192.168.9.202
public
equipe
3
3
162
192.168.9.205
public
equipe
3
3
162
192.168.9.216
public
equipe
3
3
5012
Add
Delete
908t
OK
Cancel

FIG. 11E

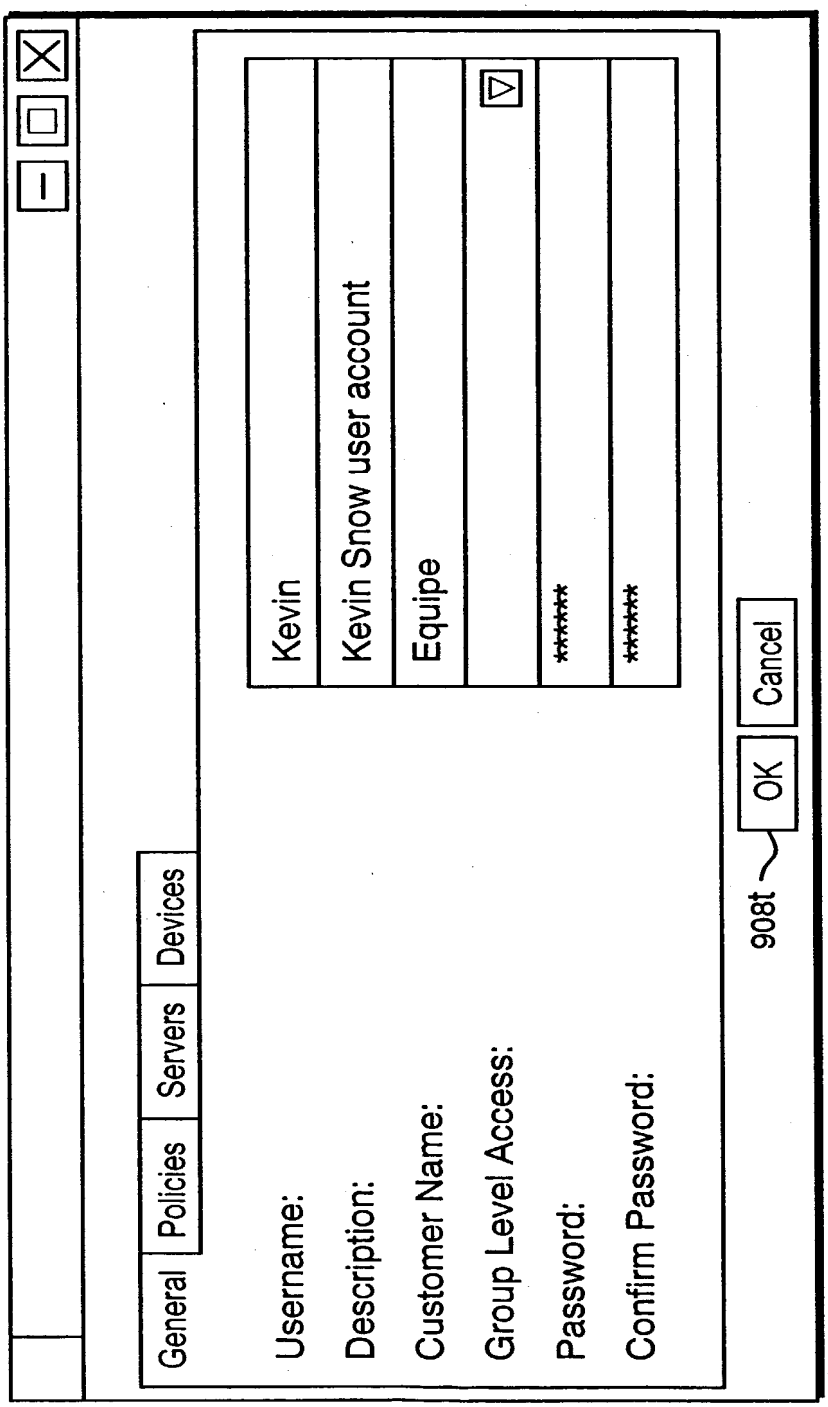

General
Policies
Servers
Devices
Username:
Description:
Customer Name:
Group Level Access:
Password:
Confirm Password:
Kevin
Kevin Snow user account
Equipe
******
******
908t
OK
Cancel

FIG. 11F

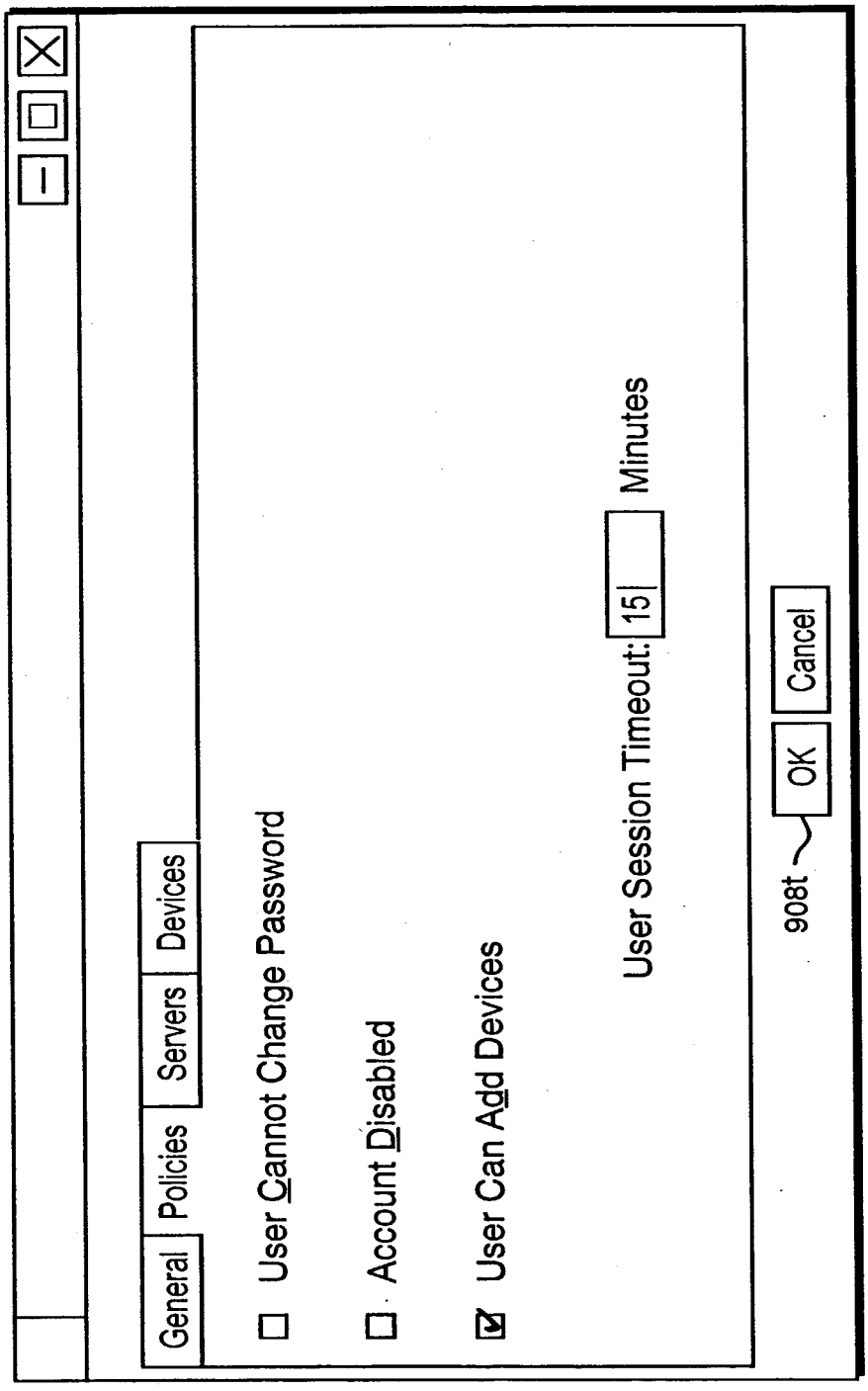

General
Policies
Servers
Devices
User Cannot Change Password
Account Disabled
User Can Add Devices
User Session Timeout: 15 Minutes
908t
OK
Cancel

FIG. 11G

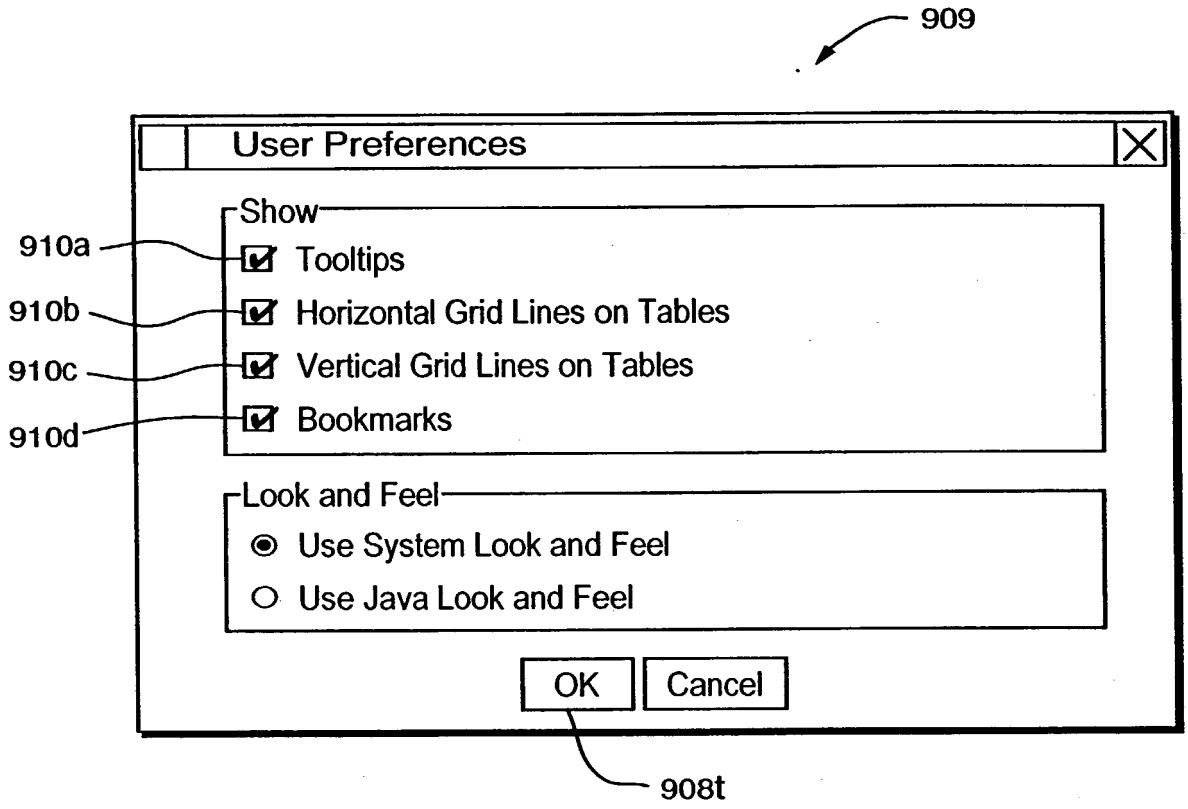

909
User Preferences
Show
910a
Tooltips
910b
Horizontal Grid Lines on Tables
910c
Vertical Grid Lines on Tables
910d
Bookmarks
Look and Feel
Use System Look and Feel
Use Java Look and Feel
OK
Cancel
908t

FIG. 11H

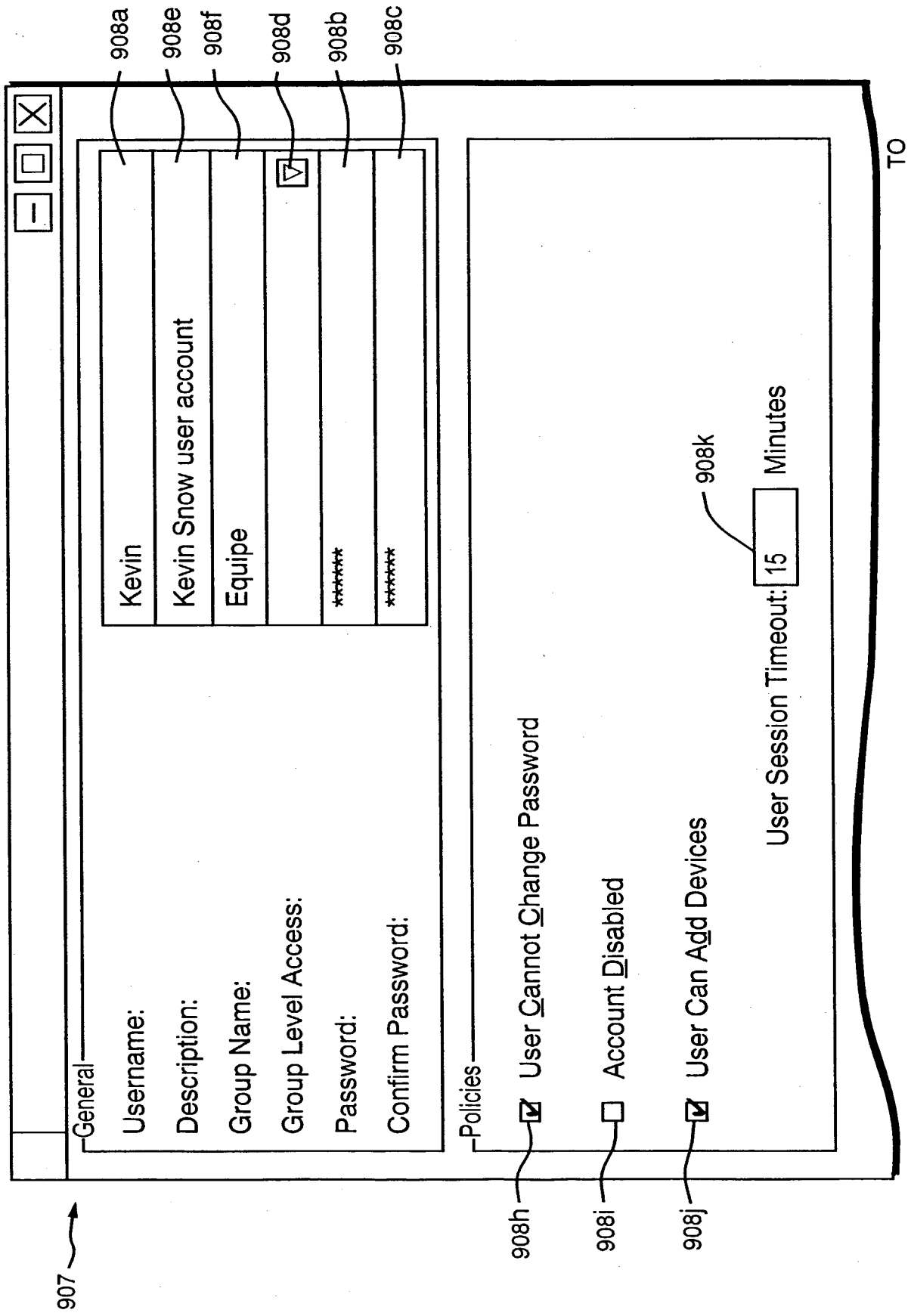

907
908a
908e
908f
908d
908b
908c
General
Username:
Description:
Group Name:
Group Level Access:
Password:
Confirm Password:
Kevin
Kevin Snow user account
Equipe
******
******
Policies
User Cannot Change Password
Account Disabled
User Can Add Devices
User Session Timeout:
15
Minutes
908k
908h
908i
908j
TO
FIG. 11J

FIG. 11I

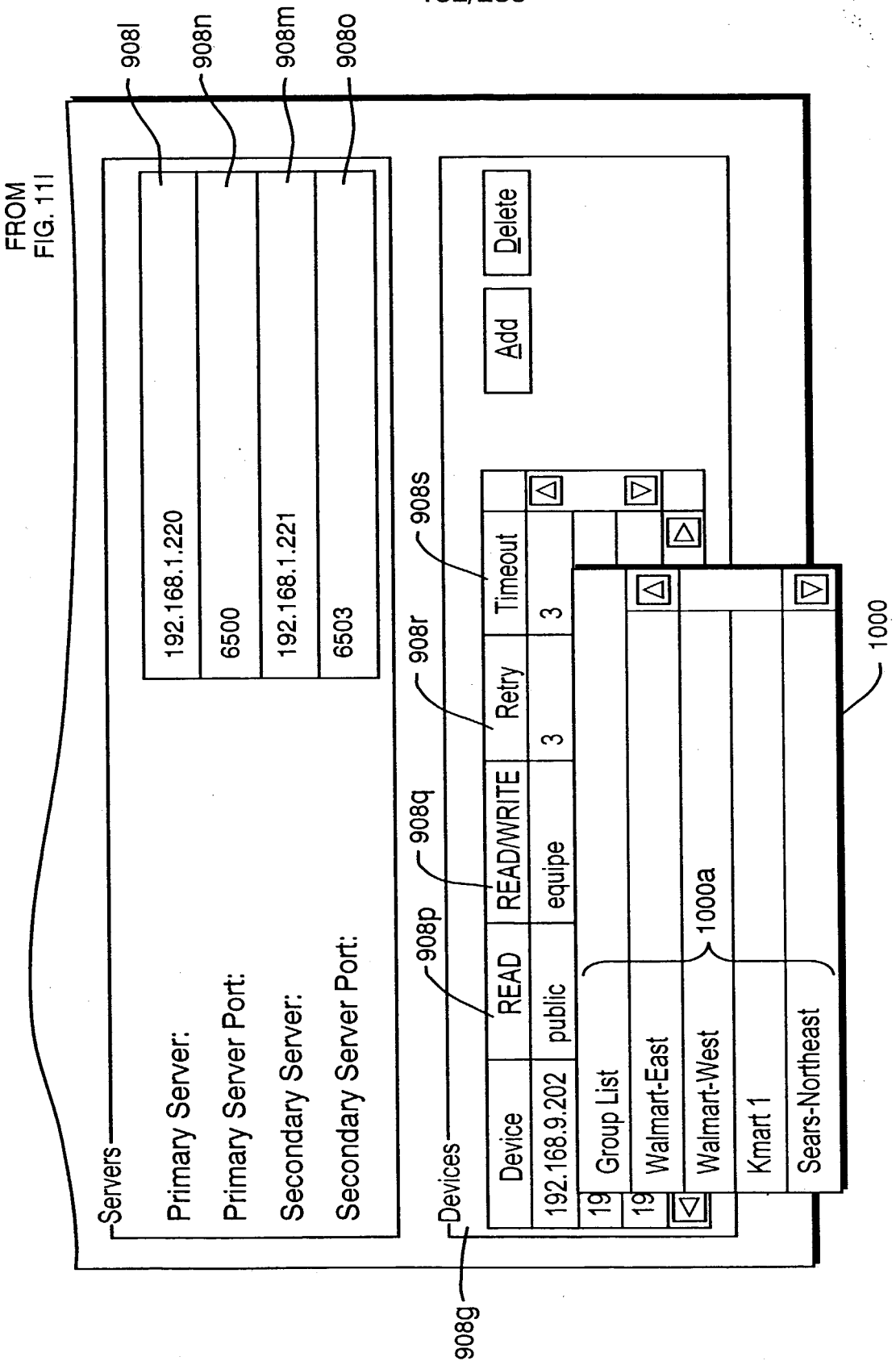

FROM FIG. 11I
908l
908n
908m
908o
Servers
Primary Server:
192.168.1.220
Primary Server Port:
6500
Secondary Server:
192.168.1.221
Secondary Server Port:
6503
Add
Delete
Devices
908s
908r
908q
908p
908g
Device
READ
READ/WRITE
Retry
Timeout
192.168.9.202
public
equipe
3
3
Group List
Walmart-East
Walmart-West
Kmart 1
Sears-Northeast
1000a
1000

FIG. 11J

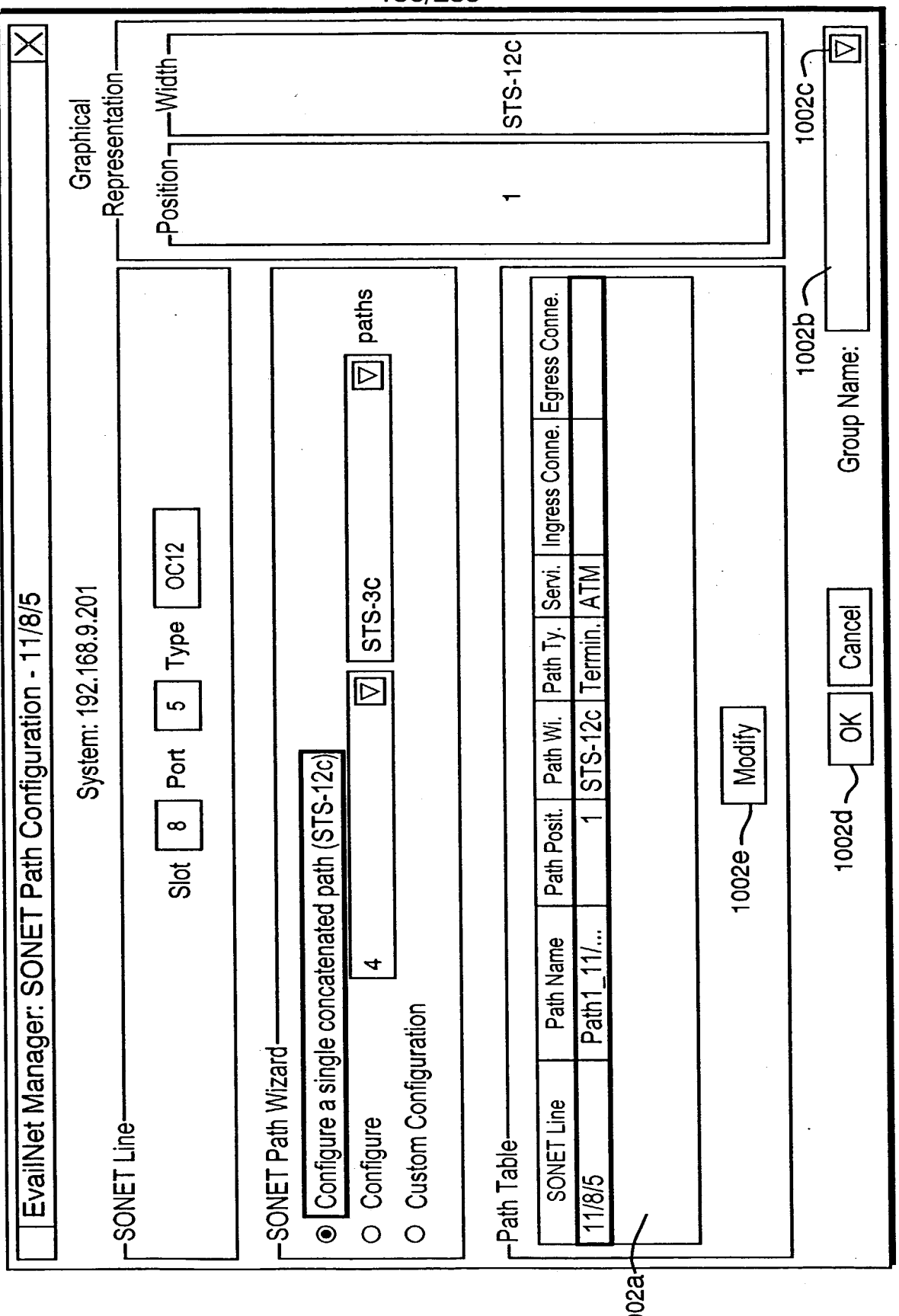

1002
EvailNet Manager: SONET Path Configuration - 11/8/5
SONET Line
System: 192.168.9.201
Slot 8 Port 5 Type OC12
Graphical Representation
Position
Width
1
STS-12c
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure 4 paths
Custom Configuration
STS-3c
Path Table
SONET Line
Path Name
Path Posit.
Path Wi.
Path Ty.
Servi.
Ingress Conne.
Egress Conne.
11/8/5
Path1_11/...
1
STS-12c
Termin.
ATM
Modify
1002a
1002b
1002c
Group Name:
1002d
OK
Cancel
1002e

FIG. 11K

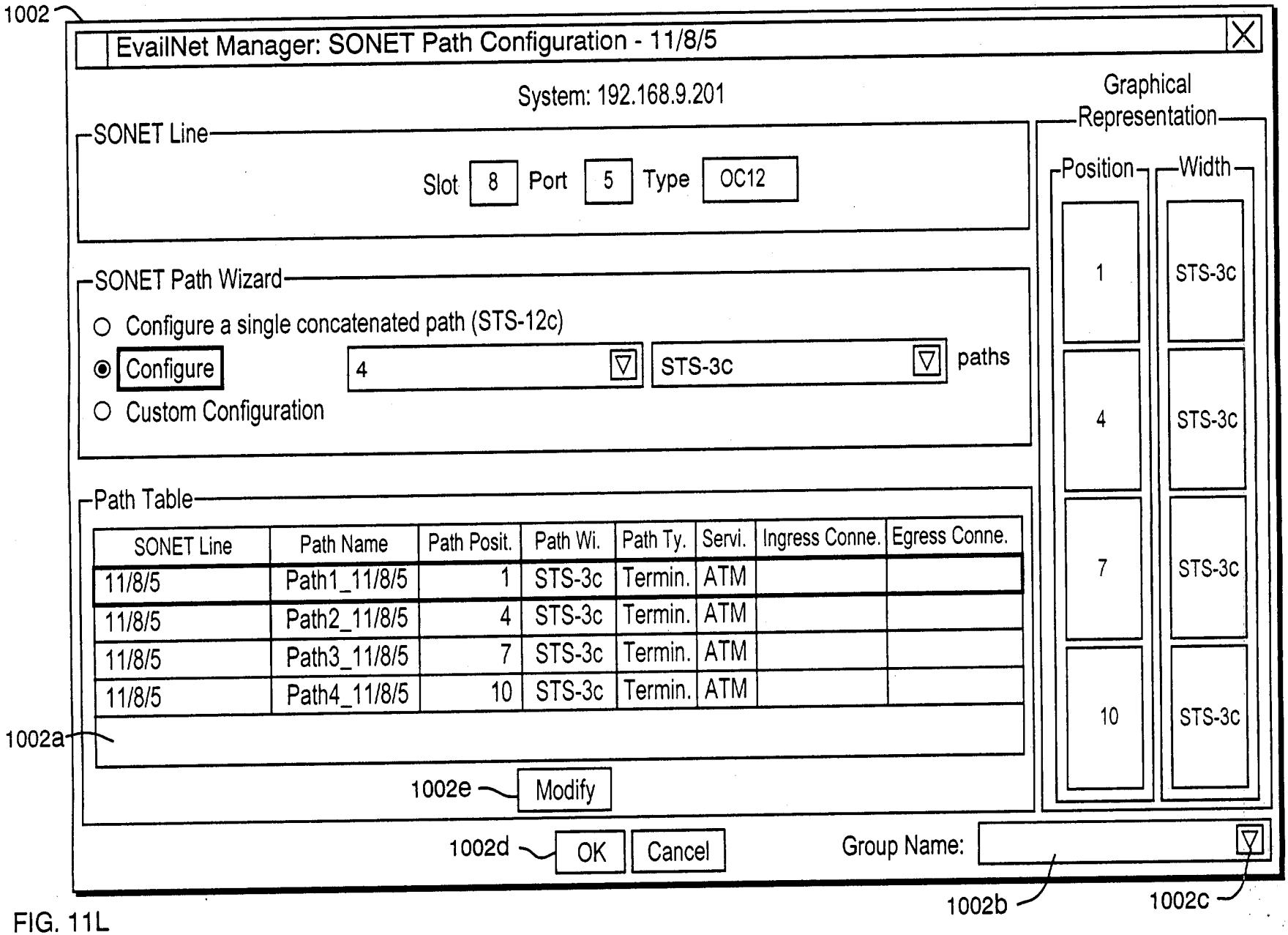

1002
EvailNet Manager: SONET Path Configuration - 11/8/5
System: 192.168.9.201
SONET Line
Slot 8 Port 5 Type OC12
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure
4
STS-3c
paths
Custom Configuration
Path Table
SONET Line | Path Name | Path Posit. | Path Wi. | Path Ty. | Servi. | Ingress Conne. | Egress Conne.
11/8/5 | Path1_11/8/5 | 1 | STS-3c | Termin. | ATM
11/8/5 | Path2_11/8/5 | 4 | STS-3c | Termin. | ATM
11/8/5 | Path3_11/8/5 | 7 | STS-3c | Termin. | ATM
11/8/5 | Path4_11/8/5 | 10 | STS-3c | Termin. | ATM
1002a
1002e
Modify
1002d
OK
Cancel
Group Name:
1002b
1002c
Graphical Representation
Position
Width
1
4
7
10
STS-3c
STS-3c
STS-3c
STS-3c

FIG. 11L

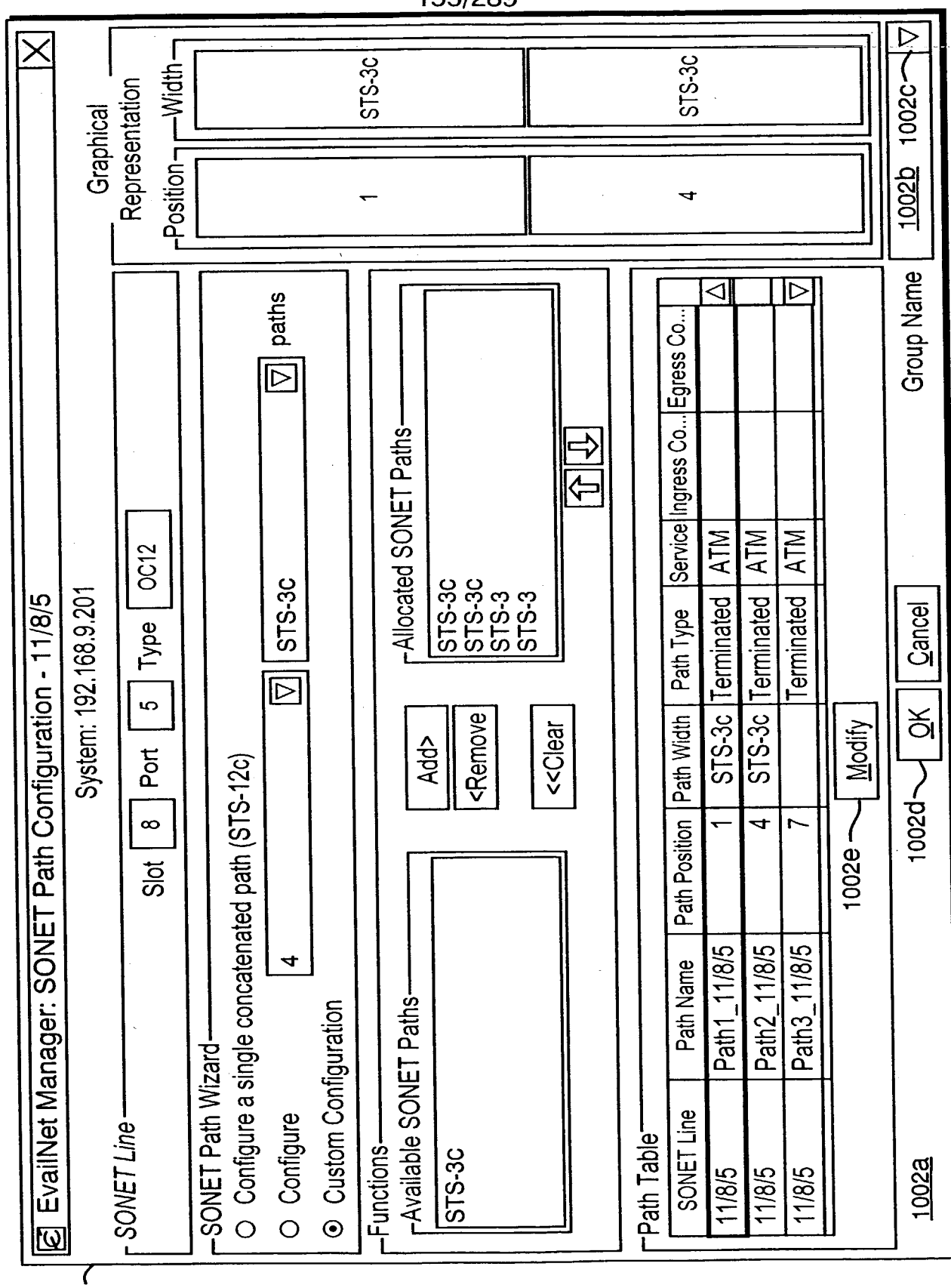

1002
EvailNet Manager: SONET Path Configuration - 11/8/5
System: 192.168.9.201
SONET Line
Slot 8 Port 5 Type OC12
SONET Path Wizard
Configure a single concatenated path (STS-12c)
Configure 4 STS-3c paths
Custom Configuration
Functions
Available SONET Paths
STS-3c
Add>
<Remove
<<Clear
Allocated SONET Paths
STS-3c
STS-3c
STS-3
STS-3
Graphical Representation
Position
Width
1
STS-3c
4
STS-3c
Path Table
SONET Line | Path Name | Path Position | Path Width | Path Type | Service | Ingress Co... | Egress Co...
11/8/5 | Path1_11/8/5 | 1 | STS-3c | Terminated | ATM
11/8/5 | Path2_11/8/5 | 4 | STS-3c | Terminated | ATM
11/8/5 | Path3_11/8/5 | 7 | | Terminated | ATM
1002e
Modify
1002a
1002d
OK
Cancel
Group Name
1002b
1002c

FIG. 11M

MANAGED RESOURCE GROUP TABLE 1008

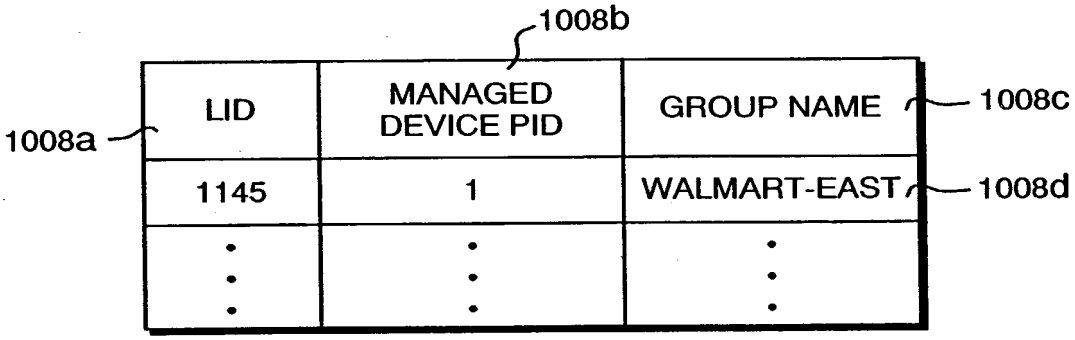


FIG. 11N

MANAGED RESOURCE TABLE 1007

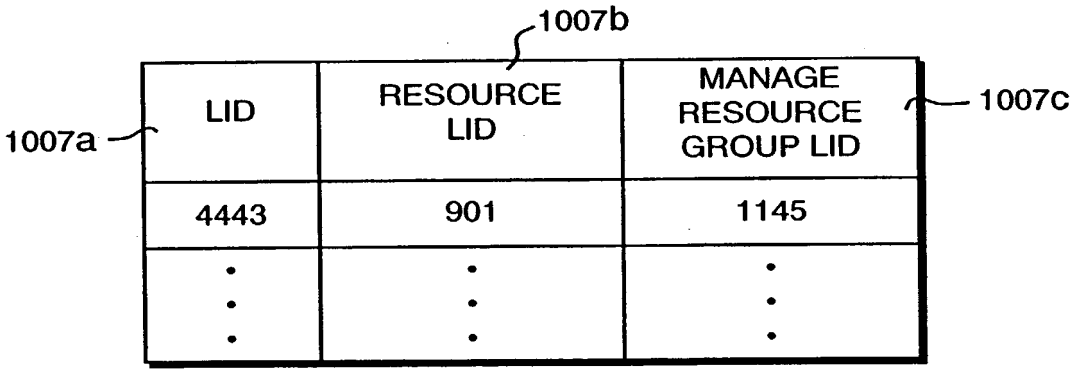


FIG. 11O

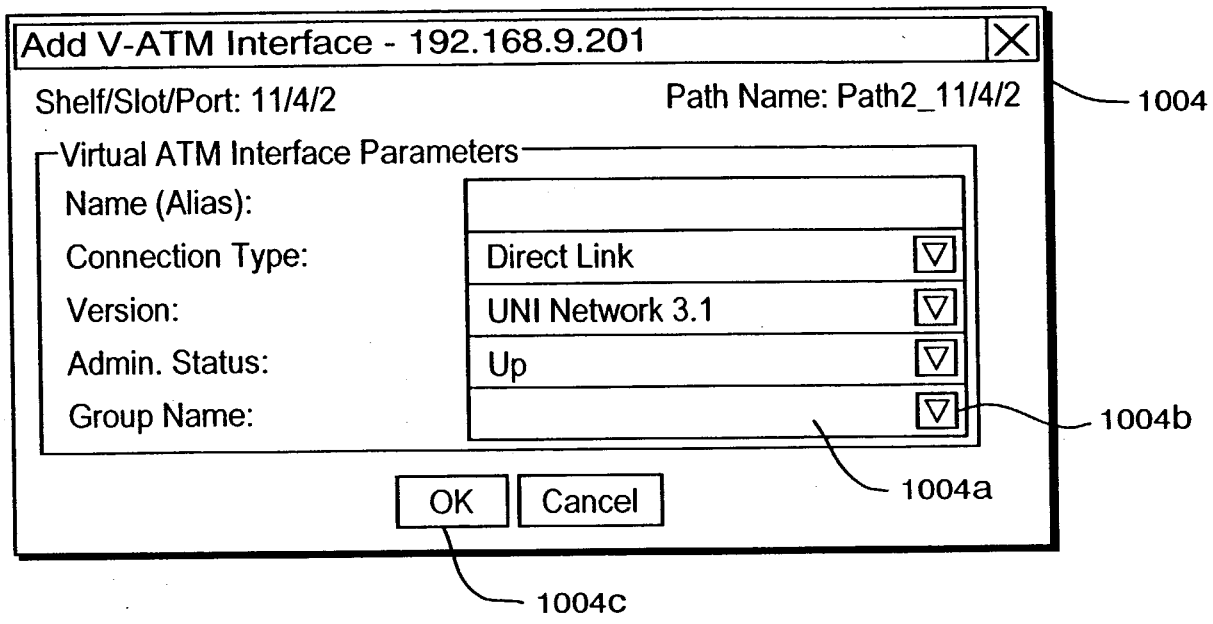

Add V-ATM Interface - 192.168.9.201
Shelf/Slot/Port: 11/4/2
Path Name: Path2_11/4/2
1004
Virtual ATM Interface Parameters
Name (Alias):
Connection Type:
Direct Link
Version:
UNI Network 3.1
Admin. Status:
Up
Group Name:
1004b
1004a
OK
Cancel
1004c

FIG. 11P

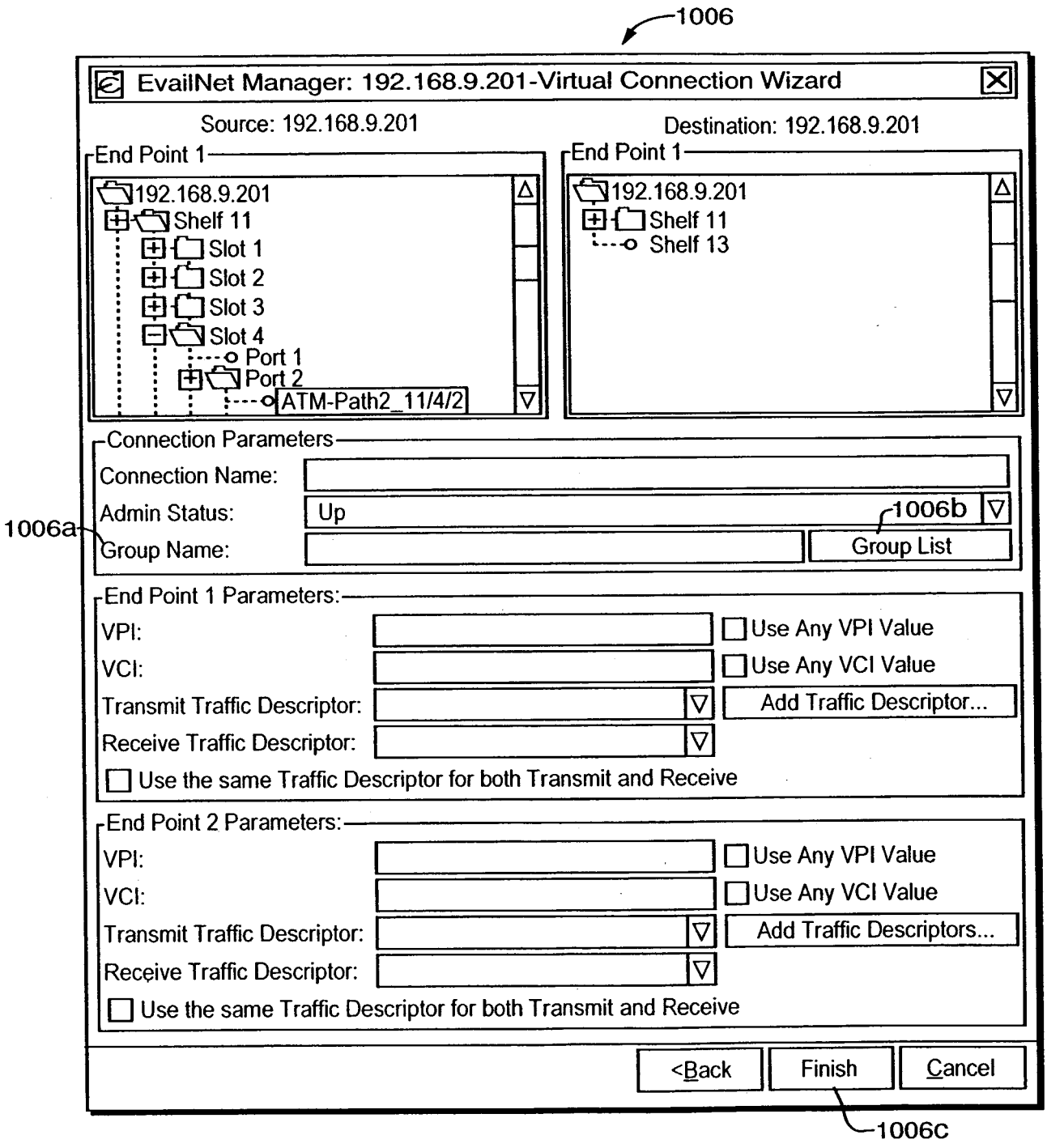

1006
EvailNet Manager: 192.168.9.201-Virtual Connection Wizard
Source: 192.168.9.201
Destination: 192.168.9.201
End Point 1
192.168.9.201
Shelf 11
Slot 1
Slot 2
Slot 3
Slot 4
Port 1
Port 2
ATM-Path2_11/4/2
End Point 1
192.168.9.201
Shelf 11
Shelf 13
Connection Parameters
Connection Name:
Admin Status:
Up
1006b
1006a
Group Name:
Group List
End Point 1 Parameters:
VPI:
Use Any VPI Value
VCI:
Use Any VCI Value
Transmit Traffic Descriptor:
Add Traffic Descriptor...
Receive Traffic Descriptor:
Use the same Traffic Descriptor for both Transmit and Receive
End Point 2 Parameters:
VPI:
Use Any VPI Value
VCI:
Use Any VCI Value
Transmit Traffic Descriptor:
Add Traffic Descriptors...
Receive Traffic Descriptor:
Use the same Traffic Descriptor for both Transmit and Receive
<Back
Finish
Cancel
1006c

FIG. 11Q

USER TABLE 1010

1010a LID	USERNAME (1010b)	PASSWORD (1010c)	GROUP LEVEL ACCESS (1010d)
2012	DAVE	MARBLE	PROVISIONER (1010e)
•	•	•	
•	•	•	
•	•	•	

FIG. 11R

USER MANAGED DEVICE TABLE 1012

1012a LID	USER LID (1012b)	HOST LID (1012c)	RETRY (1012d)	TIMEOUT (1012e)
7892	2012	9046		
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG. 11S

ADMINISTRATION MANAGED DEVICE TABLE 1014

LID	HOST ADDRESS	PORT ADDRESS	RETRY	TIMEOUT	ADMIN. PASSWORD	PROV. PASSWORD	VIEWER PASSWORD
9046	192.168.9.202	1521			TEAM 1	TEAM 2	TEAM 3
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .

1014a 1014c 1014b 1014e 1014d

FIG. 11T

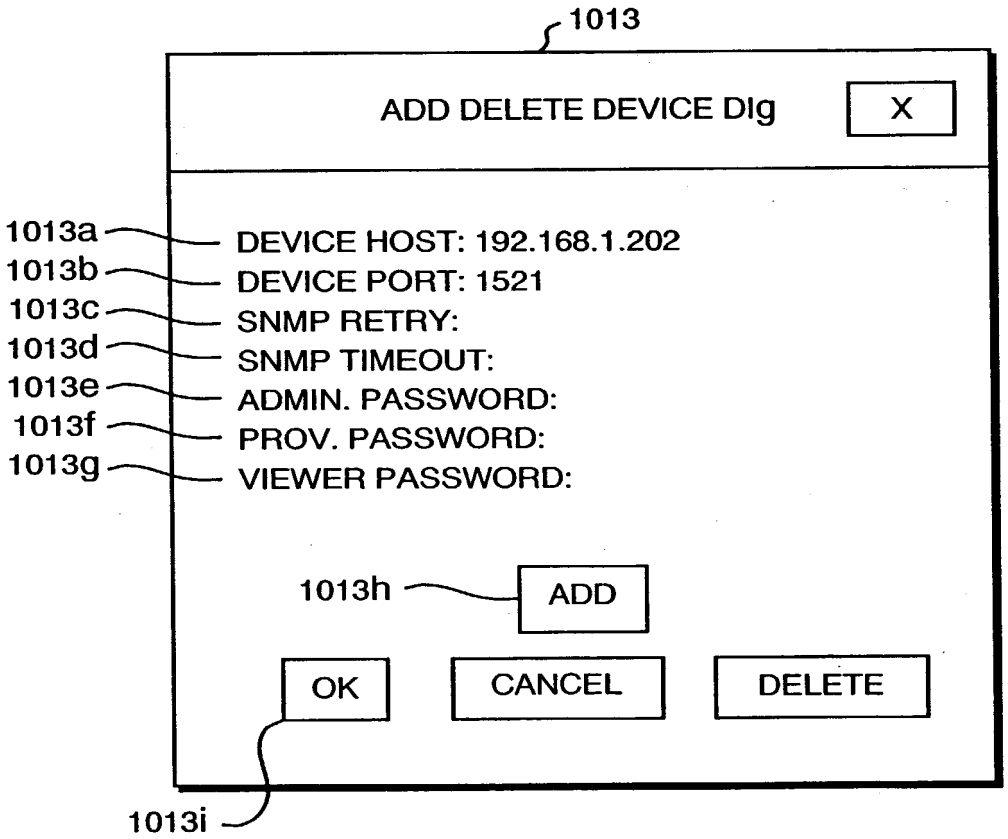

1013
ADD DELETE DEVICE Dlg
X
1013a
DEVICE HOST: 192.168.1.202
1013b
DEVICE PORT: 1521
1013c
SNMP RETRY:
1013d
SNMP TIMEOUT:
1013e
ADMIN. PASSWORD:
1013f
PROV. PASSWORD:
1013g
VIEWER PASSWORD:
1013h
ADD
OK
CANCEL
DELETE
1013i

FIG. 11U

USER RESOURCE GROUP MAP TABLE 1016

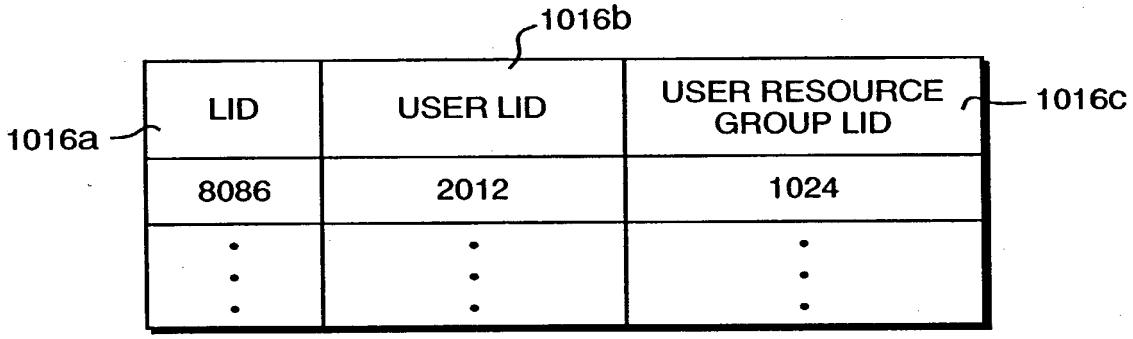


FIG. 11V

USER RESOURCE GROUP TABLE 1018

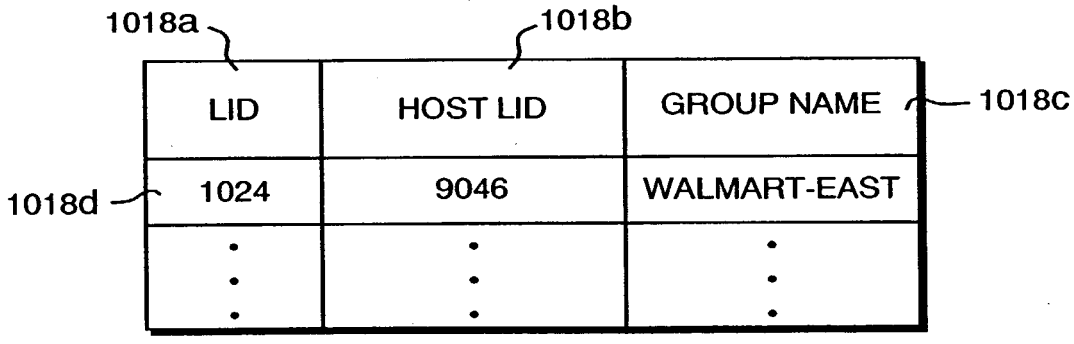


FIG. 11W

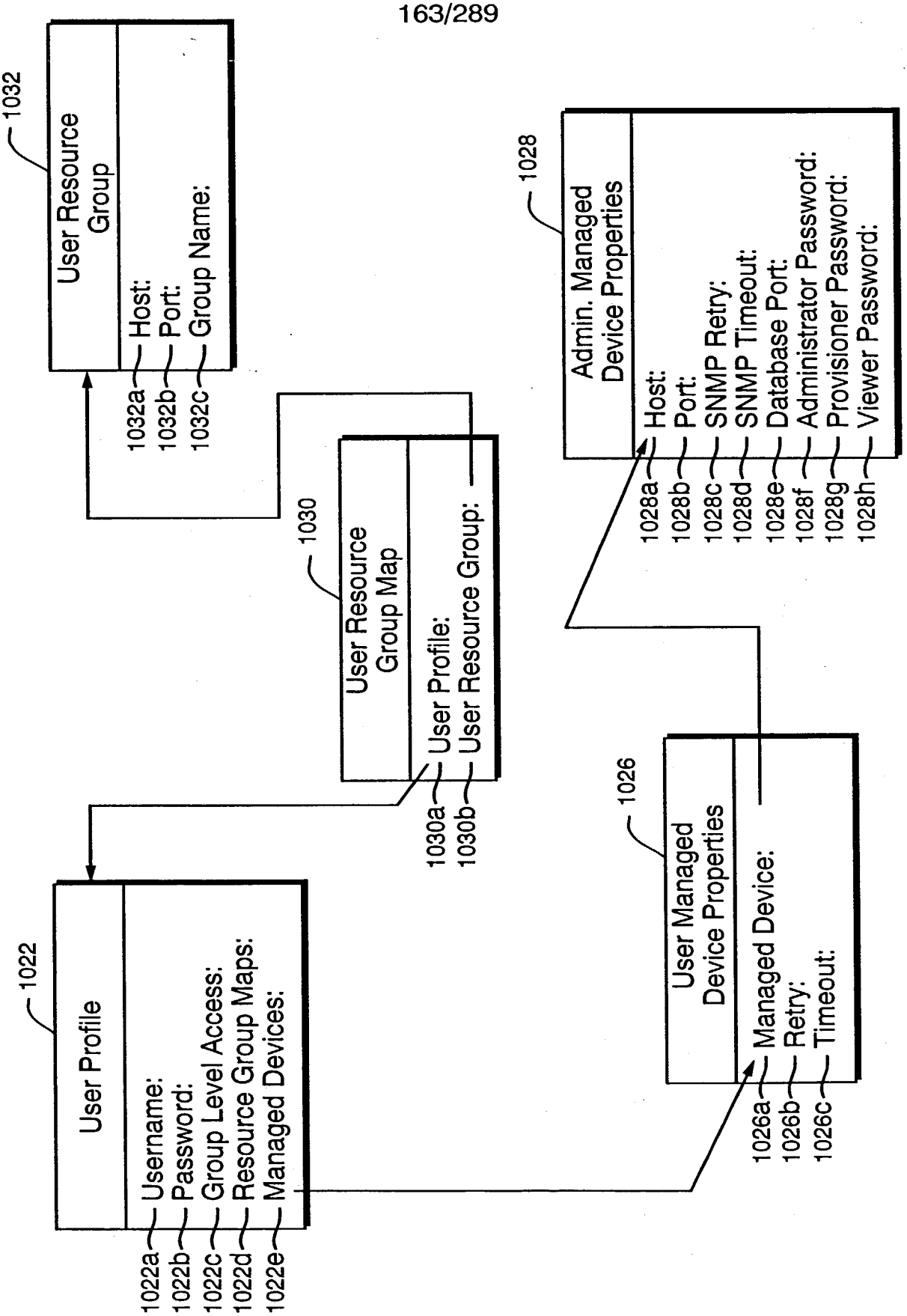

1032
User Resource Group
Host:
Port:
Group Name:
1032a
1032b
1032c
1028
Admin. Managed Device Properties
Host:
Port:
SNMP Retry:
SNMP Timeout:
Database Port:
Administrator Password:
Provisioner Password:
Viewer Password:
1028a
1028b
1028c
1028d
1028e
1028f
1028g
1028h
1030
User Resource Group Map
User Profile:
User Resource Group:
1030a
1030b
1026
User Managed Device Properties
Managed Device:
Retry:
Timeout:
1026a
1026b
1026c
1022
User Profile
Username:
Password:
Group Level Access:
Resource Group Maps:
Managed Devices:
1022a
1022b
1022c
1022d
1022e

FIG. 11X

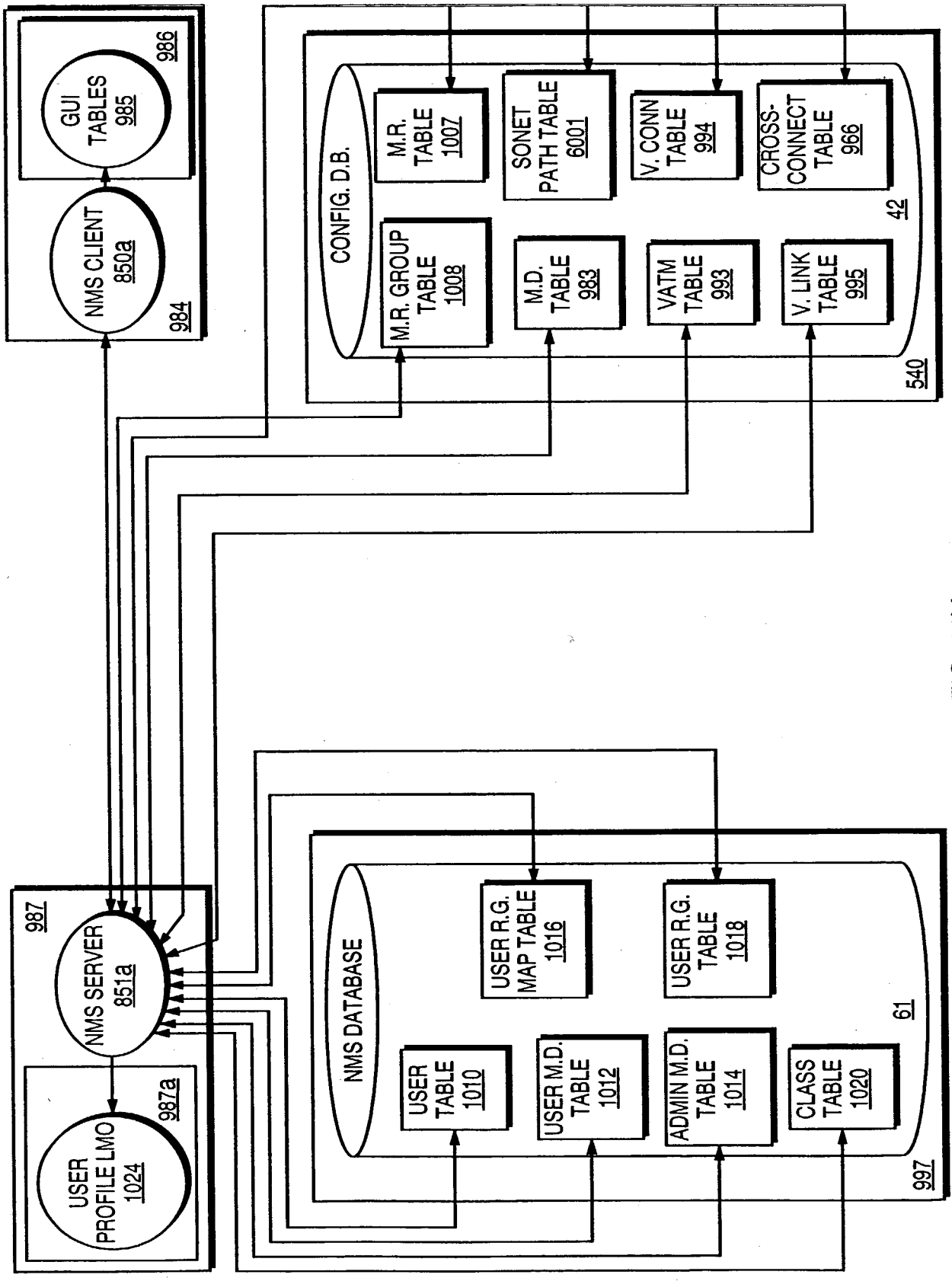

GUI TABLES 985
986
NMS CLIENT 850a
984
CONFIG. D.B.
M.R. TABLE 1007
SONET PATH TABLE 6001
V. CONN TABLE 994
CROSS-CONNECT TABLE 966
M.R. GROUP TABLE 1008
M.D. TABLE 983
VATM TABLE 993
V. LINK TABLE 995
42
540
987
NMS SERVER 851a
USER PROFILE LMO 1024
987a
NMS DATABASE
USER R.G. MAP TABLE 1016
USER R.G. TABLE 1018
USER TABLE 1010
USER M.D. TABLE 1012
ADMIN M.D. TABLE 1014
CLASS TABLE 1020
61
997

FIG. 11Y

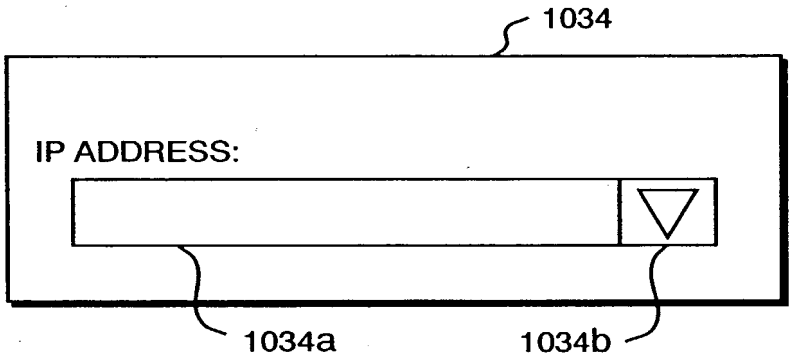


FIG. 11Z

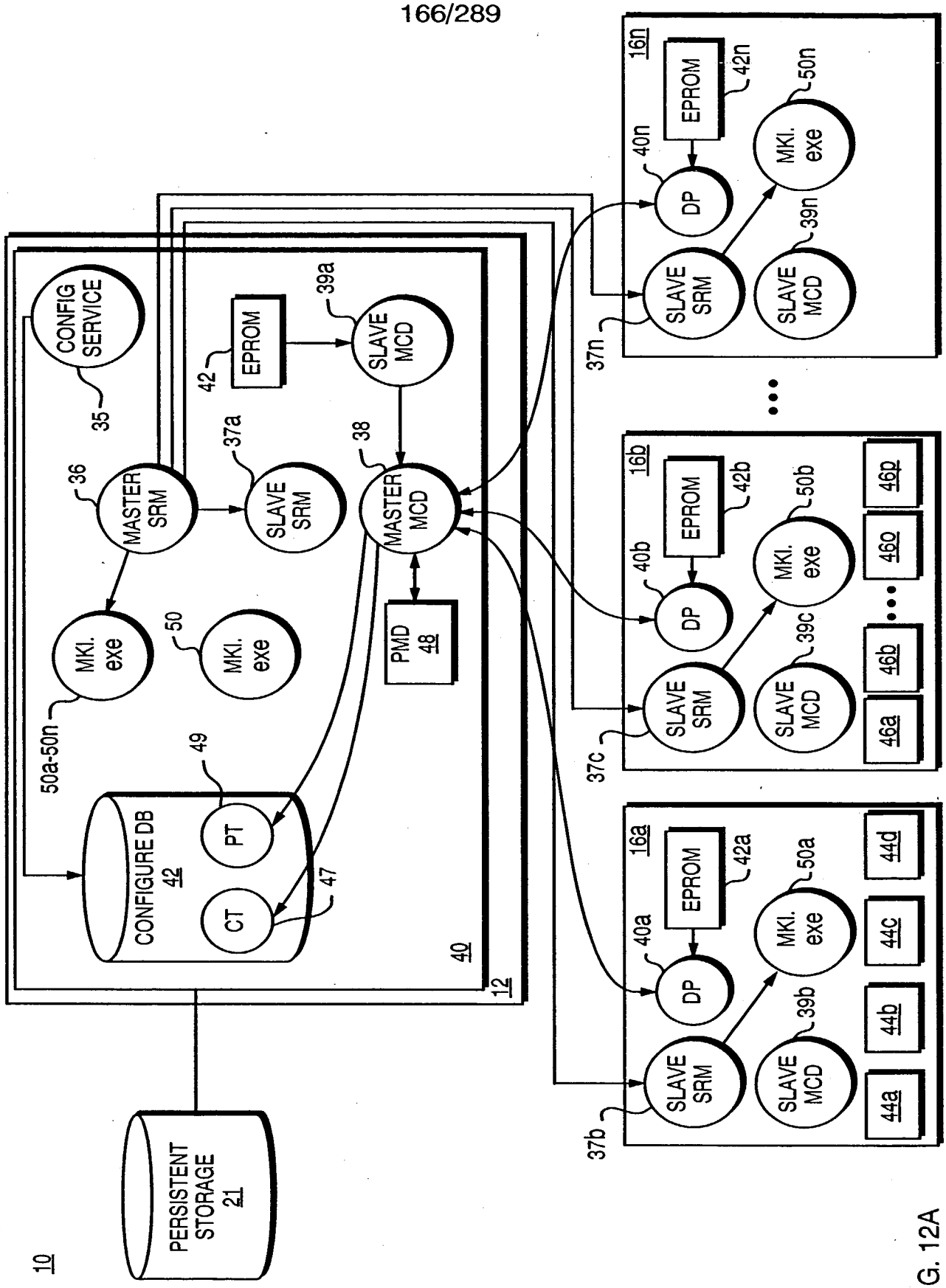

10
PERSISTENT STORAGE 21
12
40
CONFIG SERVICE 35
MASTER SRM 36
SLAVE SRM 37a
MASTER MCD 38
SLAVE MCD 39a
EPROM 42
PMD 48
MKI. exe 50
MKI. exe 50a-50n
CONFIGURE DB 42
PT 49
CT 47
16a
SLAVE SRM 37b
SLAVE MCD 39b
DP 40a
EPROM 42a
MKI. exe 50a
44a
44b
44c
44d
16b
SLAVE SRM 37c
SLAVE MCD 39c
DP 40b
EPROM 42b
MKI. exe 50b
46a
46b
46o
46p
16n
SLAVE SRM 37n
SLAVE MCD 39n
DP 40n
EPROM 42n
MKI. exe 50n

FIG. 12A

09838510 .070501

CARD TABLE 47

	PID	CWD TYPE	VERSION NO.	SLOT NO.	...
16a	500	0XF002	3	1	
16b	501	0XF002	4	2	
	•	•	•	•	•
	•	•	•	•	•
	•	•	•	•	•
16e	505	0X6002	1	5	
	•	•	•	•	•
	•	•	•	•	•
	•	•	•	•	•
16n	513	0XF002	1	12	
	•	•	•	•	•
	•	•	•	•	•
	•	•	•	•	•

FIG. 12B

09858310 .070501

PORT TABLE 49

	PID	PORT TYPE	VERSION NO.	SLOT NO.	...
44a	1500	00620	1	1	
44b	1501	00620	1	1	
44c	1502	00620	1	1	
44d	1503	00620	1	1	
44a	1504	00820			
46a	• • •	• • •	• • •	• • •	• • •
	1600	OO620	1	8	
	• • •	• • •	• • •	• • •	• • •

FIG. 12C

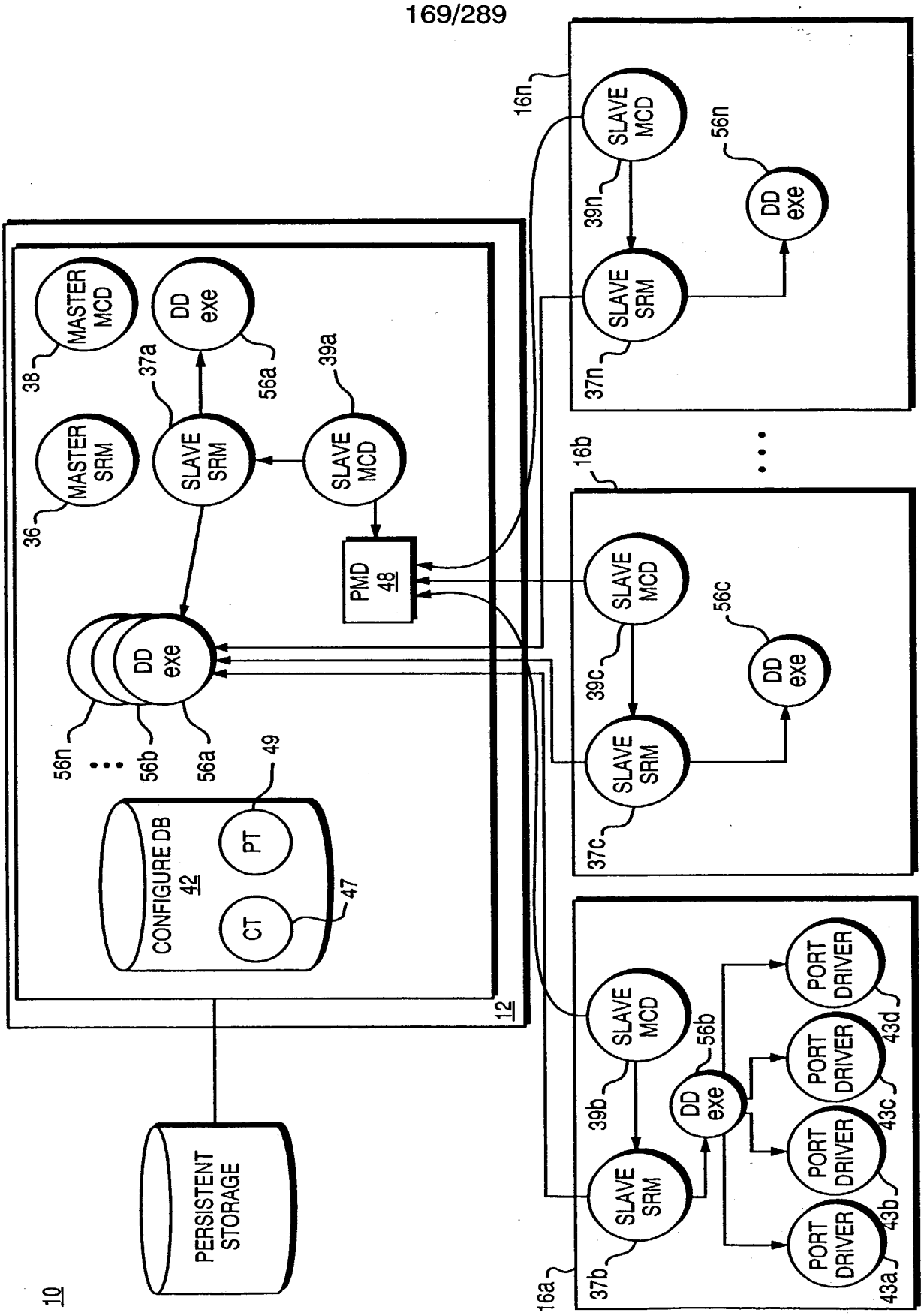

10
PERSISTENT STORAGE
12
MASTER MCD
38
MASTER SRM
36
SLAVE SRM
37a
SLAVE MCD
39a
DD exe
56a
DD exe
56b
DD exe
56n
CONFIGURE DB
42
PT
CT
49
47
PMD
48
16a
SLAVE SRM
37b
SLAVE MCD
39b
DD exe
56b
PORT DRIVER
43a
PORT DRIVER
43b
PORT DRIVER
43c
PORT DRIVER
43d
16b
SLAVE SRM
37c
SLAVE MCD
39c
DD exe
56c
16n
SLAVE SRM
37n
SLAVE MCD
39n
DD exe
56n

FIG. 13A

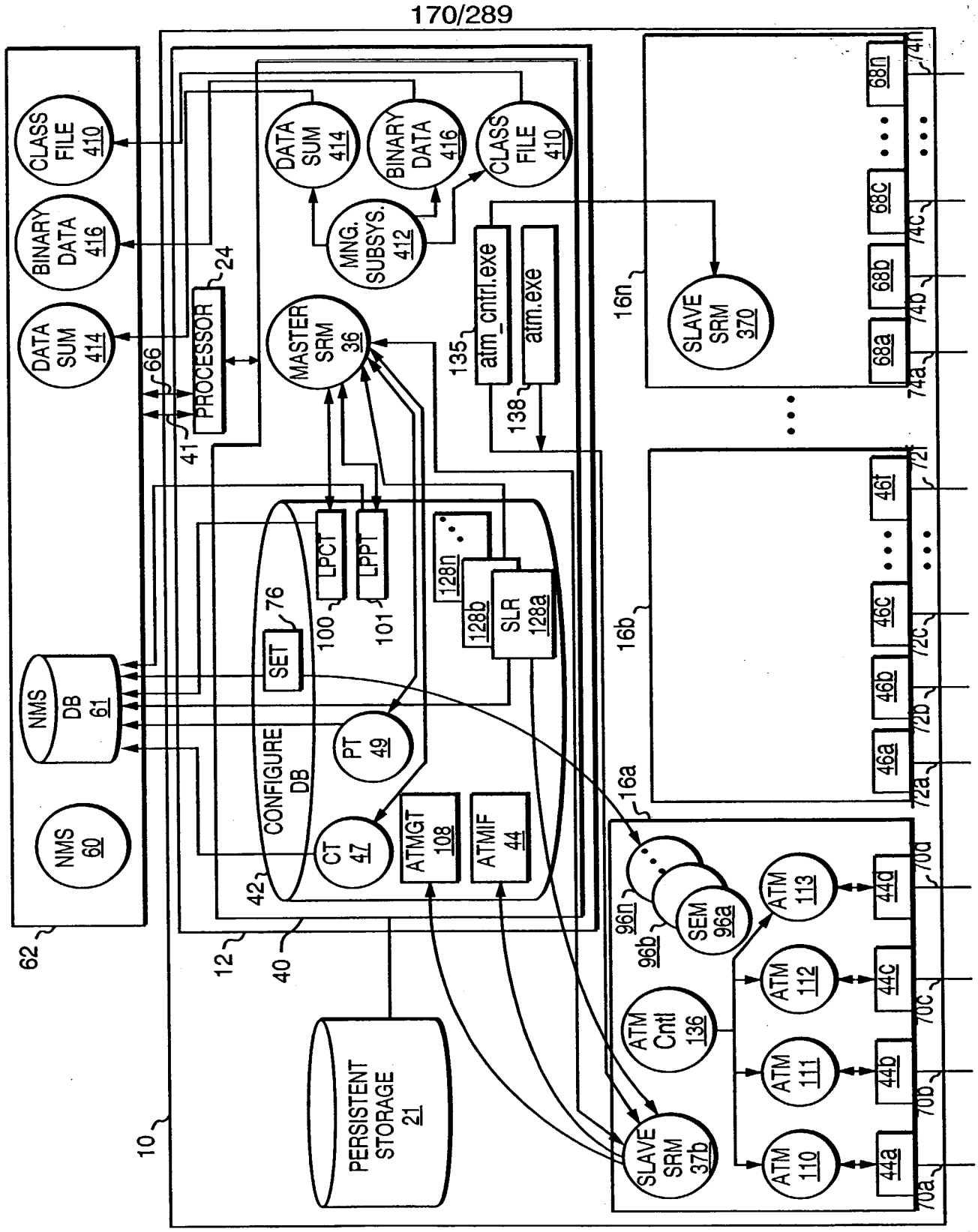

CLASS FILE 410
BINARY DATA 416
DATA SUM 414
DATA SUM 414
BINARY DATA 416
CLASS FILE 410
MNG. SUBSYS. 412
24
PROCESSOR
66
41
MASTER SRM 36
135
atm_cntrl.exe
atm.exe
138
16n
SLAVE SRM 370
68n
68c
68b
68a
74n
74c
74b
74a
LPCT
LPPT
128n
128b
SLR 128a
SET
76
100
101
NMS DB 61
CONFIGURE DB
PT 49
CT 47
ATMGT 108
ATMIF 44
42
NMS 60
62
12
40
10
16b
16a
46t
46c
46b
46a
72t
72c
72b
72a
96n
96b
SEM 96a
ATM Cntl 136
PERSISTENT STORAGE 21
SLAVE SRM 37b
ATM 110
ATM 111
ATM 112
ATM 113
44a
44b
44c
44d
70a
70b
70c
70d

FIG. 13B

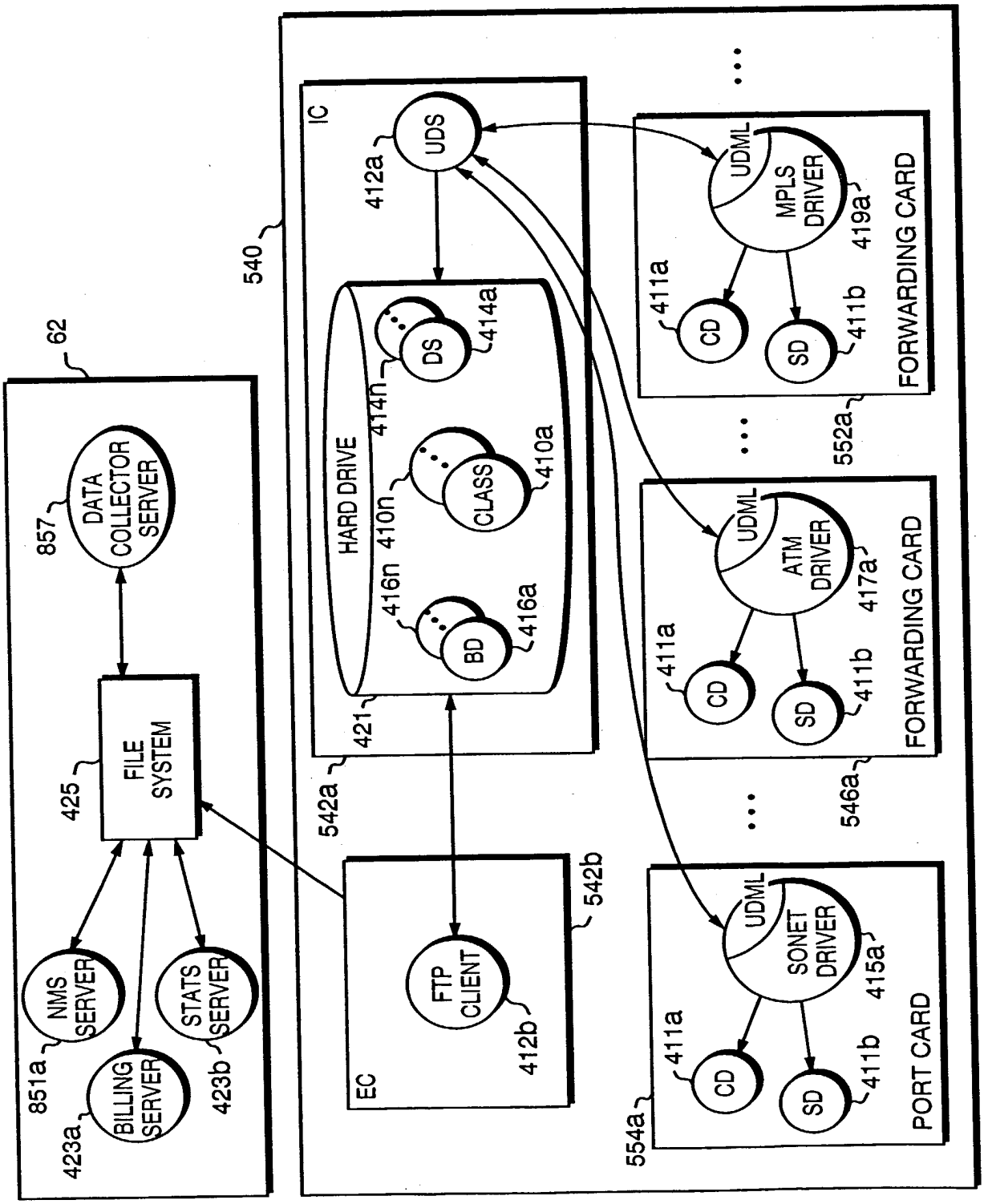

62
857
DATA COLLECTOR SERVER
425
FILE SYSTEM
851a
NMS SERVER
423a
BILLING SERVER
423b
STATS SERVER
540
IC
412a
UDS
HARD DRIVE
414n
DS
414a
410n
CLASS
410a
416n
BD
416a
421
542a
EC
FTP CLIENT
412b
542b
UDML
MPLS DRIVER
419a
411a
CD
411b
SD
FORWARDING CARD
552a
UDML
ATM DRIVER
417a
411a
CD
411b
SD
FORWARDING CARD
546a
UDML
SONET DRIVER
415a
411a
CD
411b
SD
PORT CARD
554a

FIG. 13C

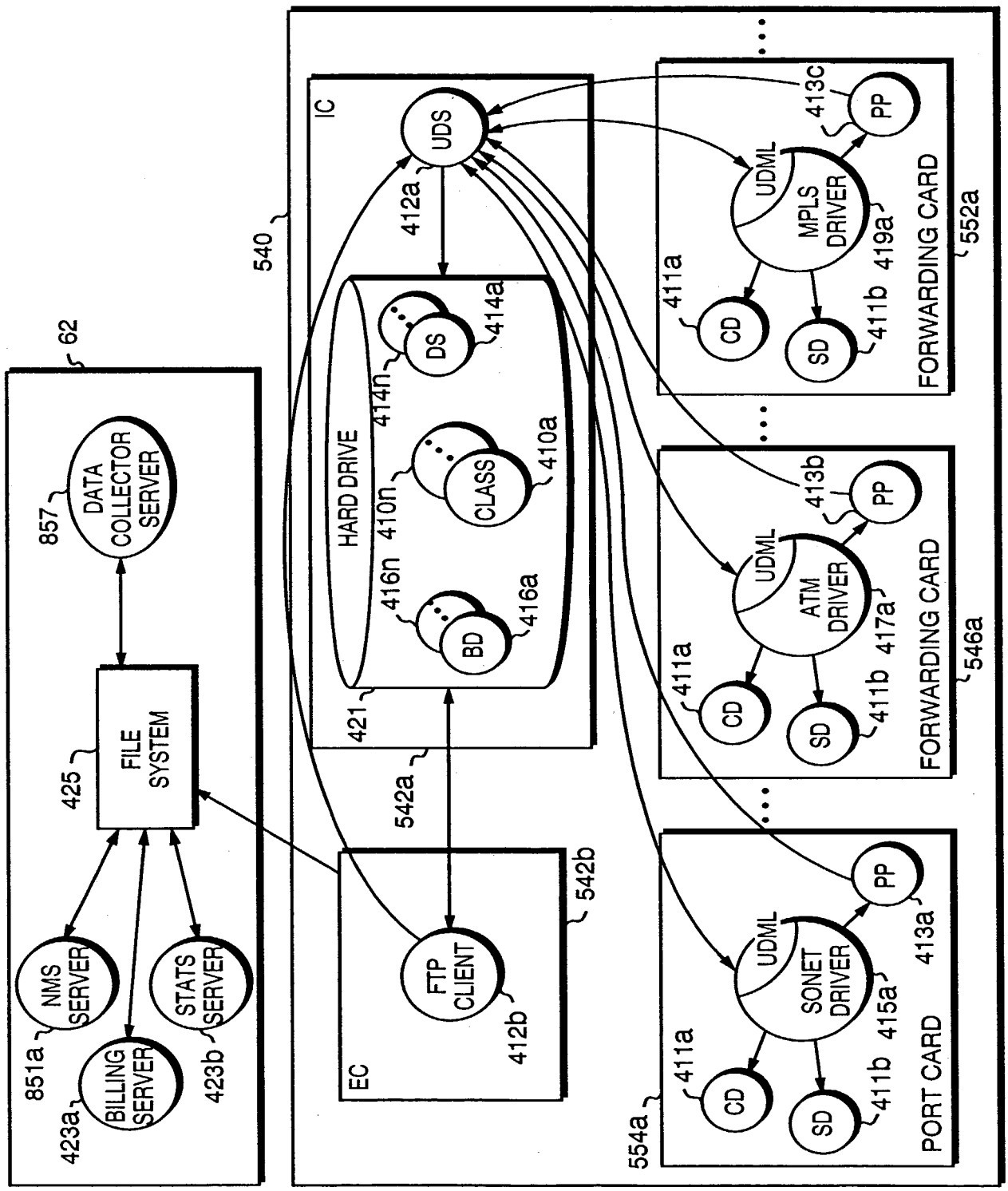

62
857
DATA COLLECTOR SERVER
425
FILE SYSTEM
851a
NMS SERVER
423a
BILLING SERVER
423b
STATS SERVER
540
IC
412a
UDS
421
HARD DRIVE
414n
DS
414a
410n
CLASS
410a
416n
BD
416a
542a
EC
FTP CLIENT
412b
542b
554a
411a
CD
SD
411b
UDML
SONET DRIVER
415a
PP
413a
PORT CARD
546a
ATM DRIVER
417a
413b
FORWARDING CARD
552a
MPLS DRIVER
419a
413c

FIG. 13D

SERVICE ENDPOINT TABLE 76

	SERVICE ENDPOINT #	PORT PID
78	1	1500
80	2	1501
82	3	1501
84	4	1501
86	5	1502
88	6	1502
90	7	1503
92	8	1503
94	9	1503
168	10	1502
	•	•
	•	•
	•	•

FIG. 14A

LOGICAL TO PHYSICAL CARD TABLE 100

	98 LID	102 PRIMARY PID	104 BACK-UP PID
106	30	500	513
109	31	501	513
	•	•	•
	•	•	•
	•	•	•

FIG. 14B

LOGICAL TO PHYSICAL PORT TABLE 101

	98 LID	102 PRIMARY PID	104 BACK-UP PID
107	40	1500	1600
	•	•	•
	•	•	•
	•	•	•

FIG. 14C

ATM GROUP TABLE 108

GROUP #	CARD LID	...
1	30	
2	30	
3	30	
4	30	

FIG. 14D

ATM INTERFACE TABLE 114

ATM IF	ATM GROUP	SE	...
1	1	1	
2	1	1	
3	1	1	
4	2	2	
5	2	3	
6	2	4	
•	•	•	•
•	•	•	•
•	•	•	•
12	3	10	
•	•	•	•
•	•	•	•
•	•	•	•

170

FIG. 14E

SOFTWARE LOAD RECORD 128a

130	CONTROL SHIM	LID	132
134	atm-cntl.exe	30	

FIG. 14F

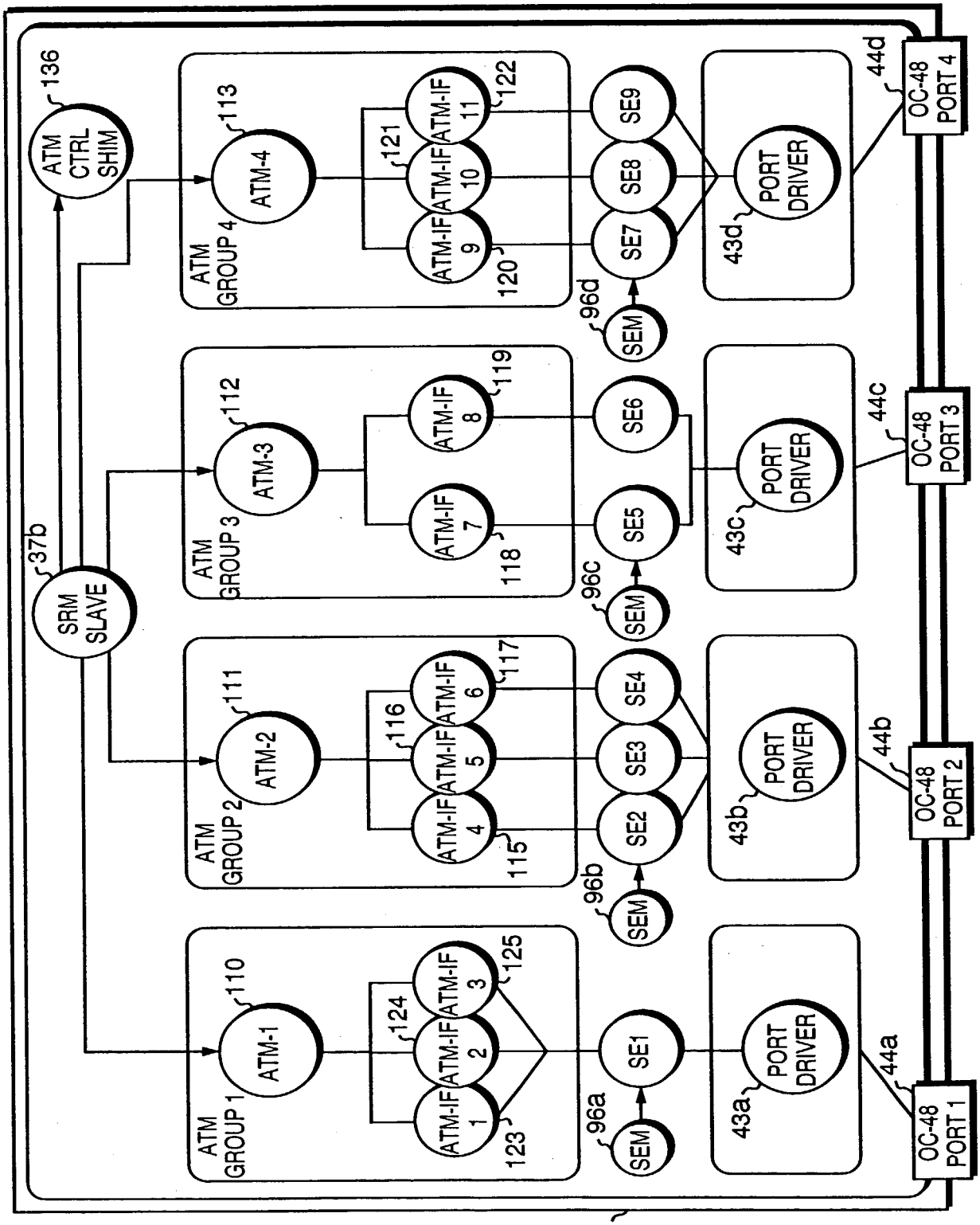

16a
ATM CTRL SHIM
136
SRM SLAVE
37b
ATM GROUP 1
ATM-1
110
ATM-IF 1
ATM-IF 2
ATM-IF 3
123
124
125
SE1
SEM
96a
ATM GROUP 2
ATM-2
111
ATM-IF 4
ATM-IF 5
ATM-IF 6
115
116
117
SE2
SE3
SE4
SEM
96b
ATM GROUP 3
ATM-3
112
ATM-IF 7
ATM-IF 8
118
119
SE5
SE6
SEM
96c
ATM GROUP 4
ATM-4
113
ATM-IF 9
ATM-IF 10
ATM-IF 11
120
121
122
SE7
SE8
SE9
SEM
96d
43a
PORT DRIVER
43b
PORT DRIVER
43c
PORT DRIVER
43d
PORT DRIVER
44a
OC-48 PORT 1
44b
OC-48 PORT 2
44c
OC-48 PORT 3
44d
OC-48 PORT 4

FIG. 15

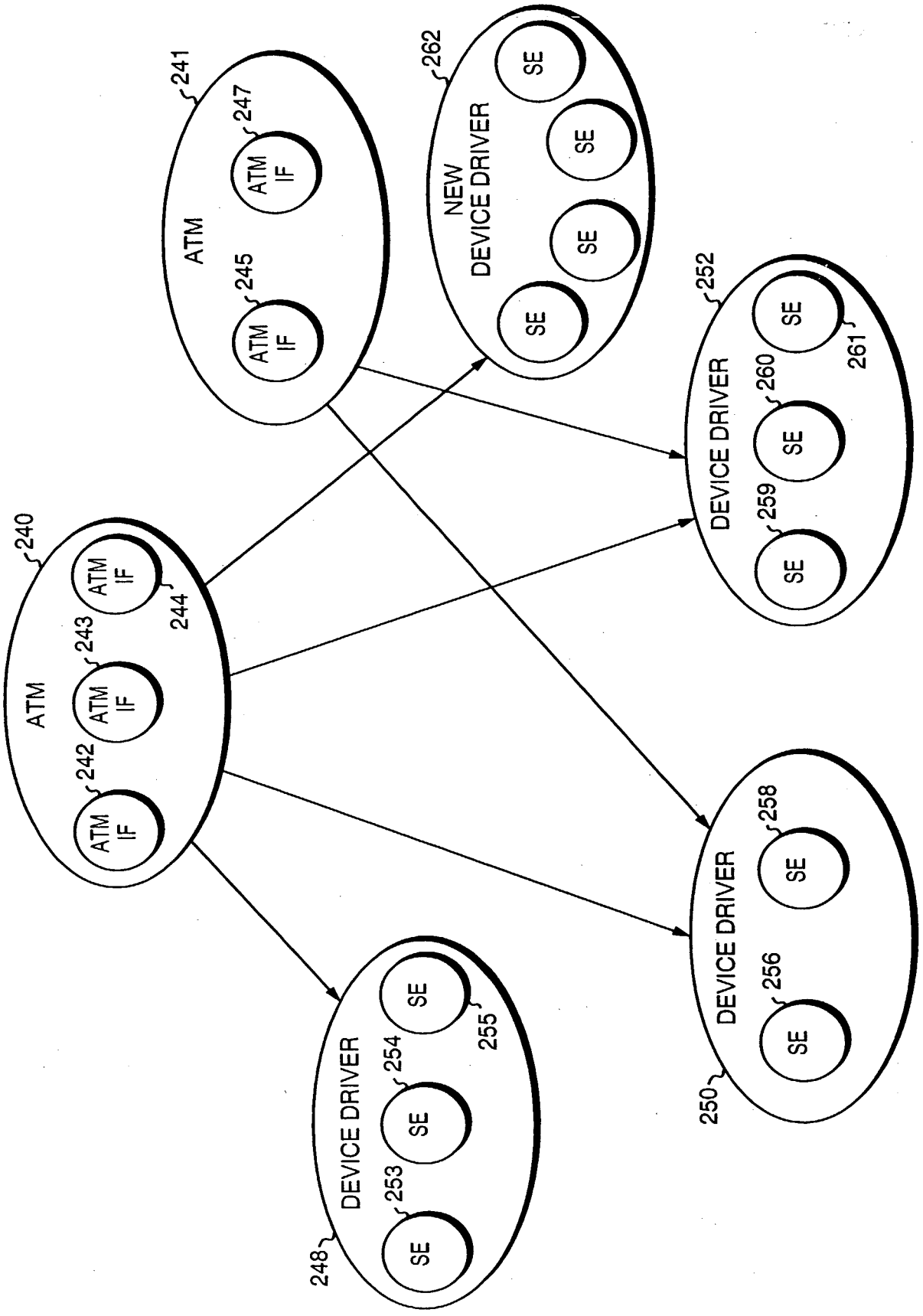

240
ATM
ATM IF
242
ATM IF
243
ATM IF
244
241
ATM
ATM IF
245
ATM IF
247
262
NEW DEVICE DRIVER
SE
SE
SE
SE
252
DEVICE DRIVER
SE
260
SE
259
SE
261
250
DEVICE DRIVER
SE
256
SE
258
248
DEVICE DRIVER
SE
253
SE
254
SE
255

FIG. 16A

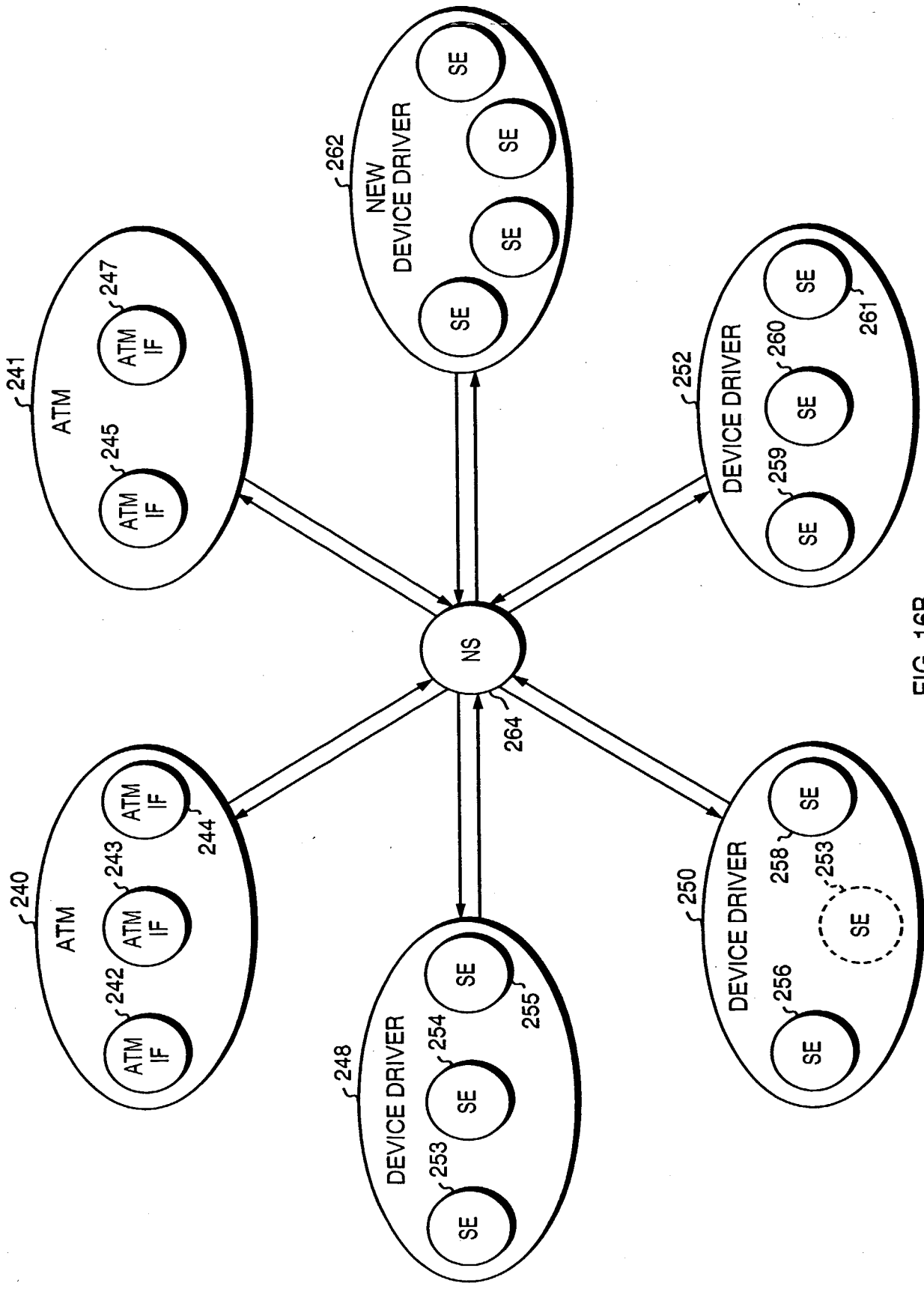

NS
264
ATM
241
ATM IF
245
ATM IF
247
NEW DEVICE DRIVER
262
SE
SE
SE
SE
DEVICE DRIVER
252
SE
259
SE
260
SE
261
ATM
240
ATM IF
242
ATM IF
243
ATM IF
244
DEVICE DRIVER
248
SE
253
SE
254
SE
255
DEVICE DRIVER
250
SE
256
SE
253
SE
258

FIG. 16B

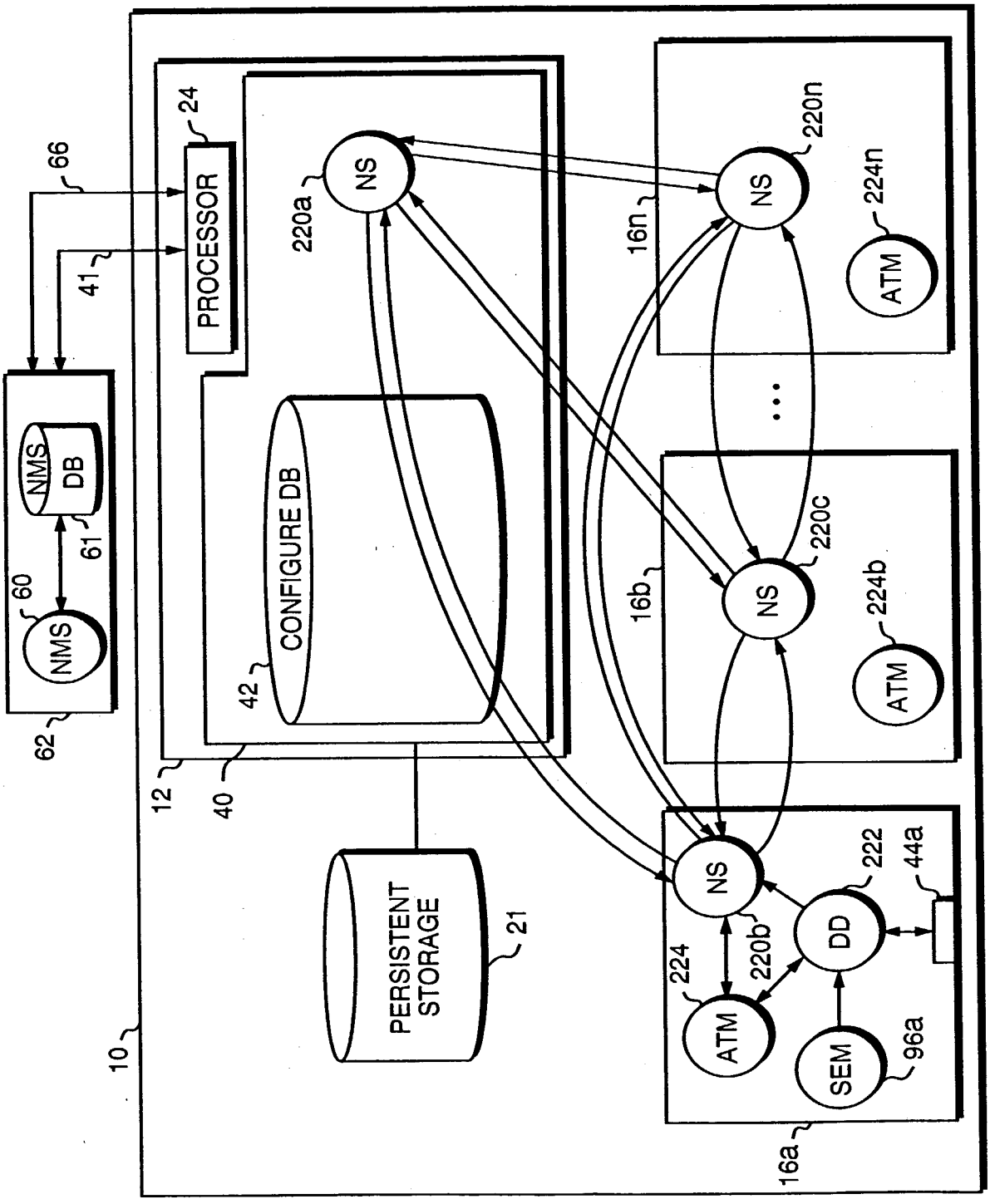

10
12
16a
16b
16n
21
24
40
41
42
44a
60
61
62
66
96a
220a
220b
220c
220n
222
224
224b
224n
PROCESSOR
CONFIGURE DB
PERSISTENT STORAGE
NMS
DB
NS
ATM
DD
SEM

FIG. 16C

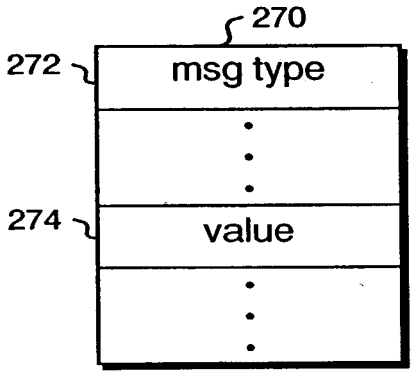


FIG. 16D

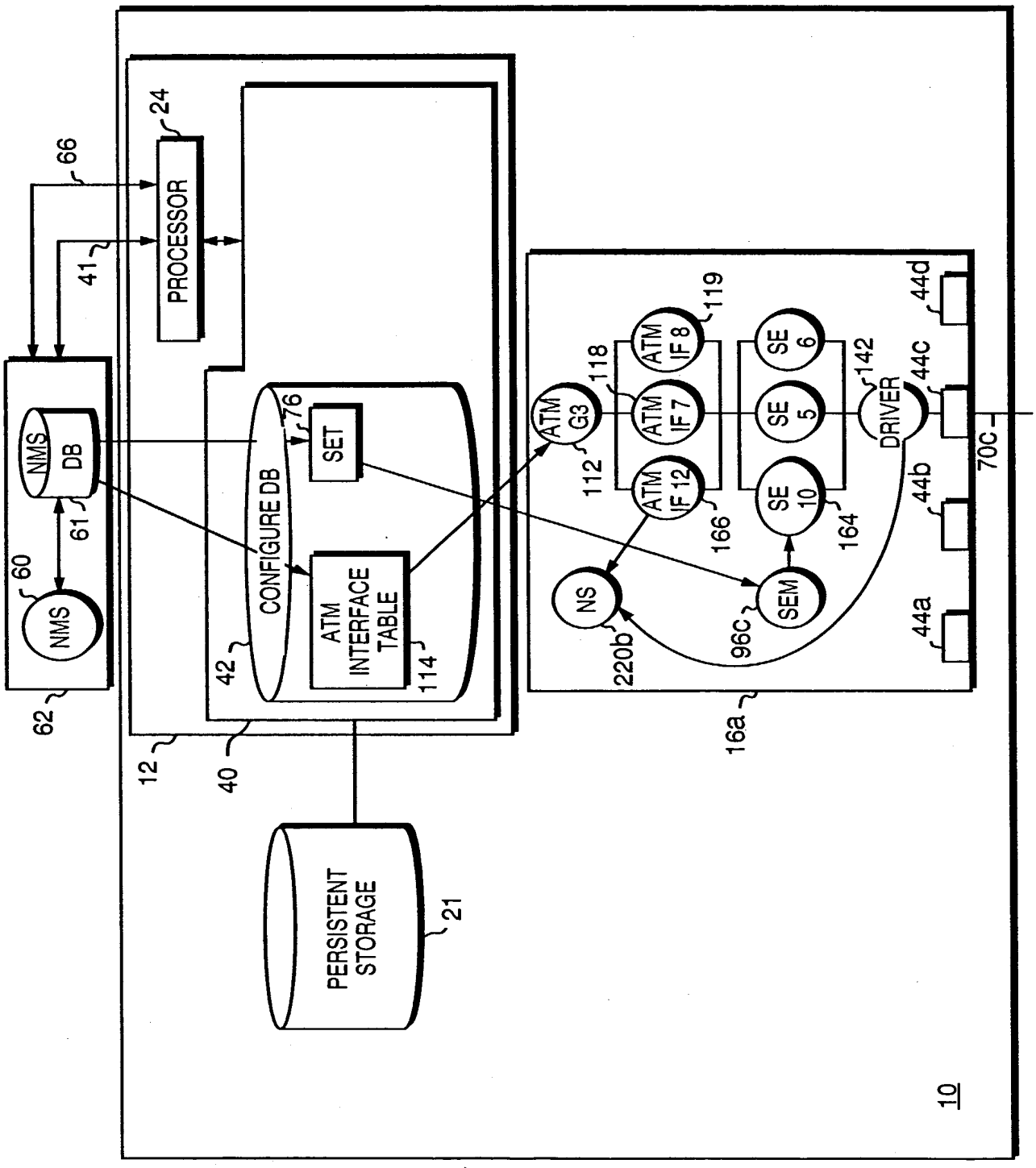

10
12
16a
24
PROCESSOR
66
41
NMS
DB
61
60
NMS
62
42
CONFIGURE DB
76
SET
ATM
INTERFACE
TABLE
114
40
PERSISTENT
STORAGE
21
ATM
G3
112
ATM
IF 7
118
ATM
IF 8
119
ATM
IF 12
166
SE
5
SE
6
SE
10
164
142
DRIVER
44d
44c
44b
44a
70c
NS
220b
SEM
96c

FIG. 17

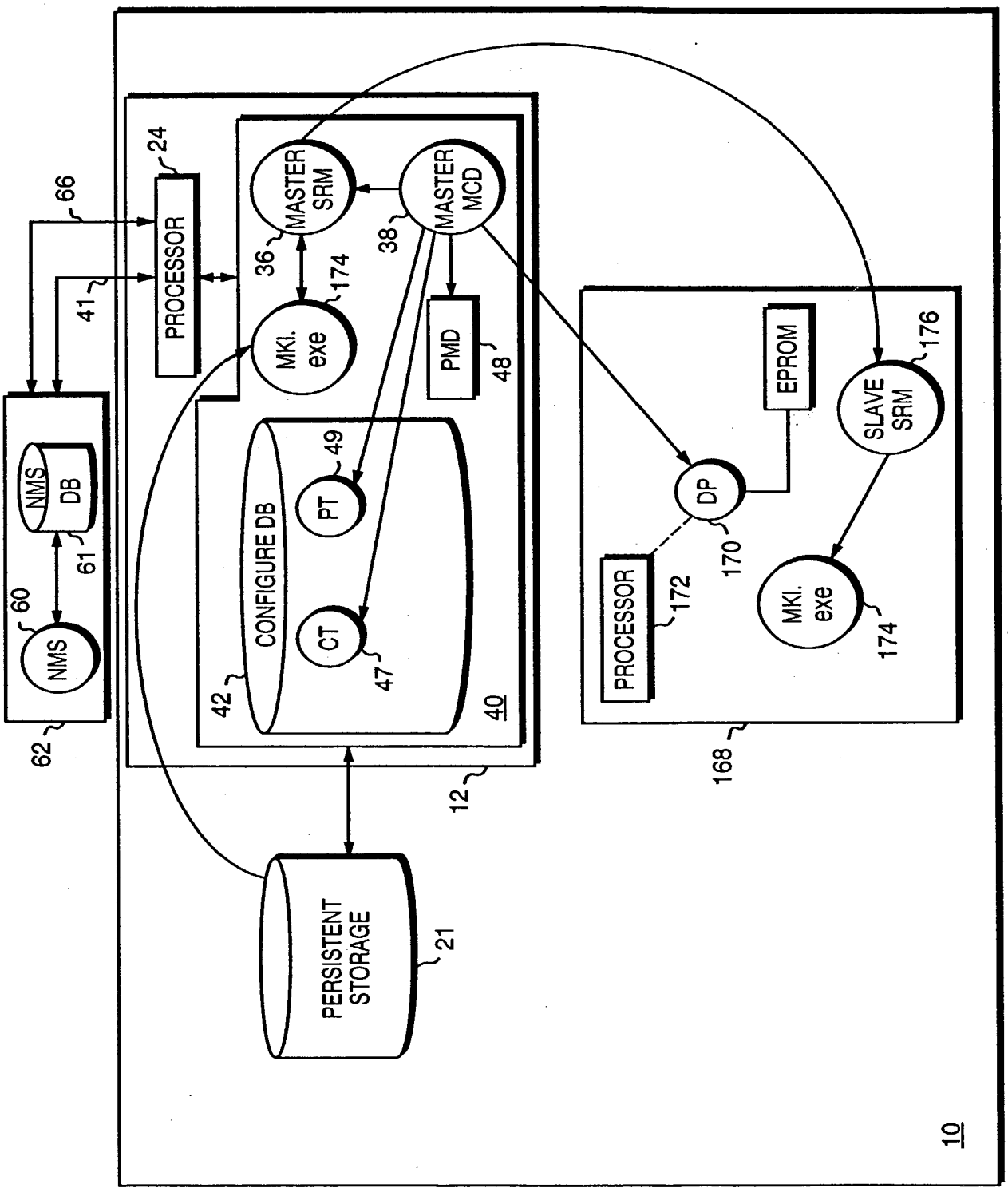

10
12
168
62
66
24
PROCESSOR
41
MASTER SRM
36
MASTER MCD
38
MKI. exe
174
PMD
48
40
CONFIGURE DB
42
PT
49
CT
47
NMS
DB
61
NMS
60
PERSISTENT STORAGE
21
EPROM
SLAVE SRM
176
DP
170
PROCESSOR
172
MKI. exe
174

FIG. 18

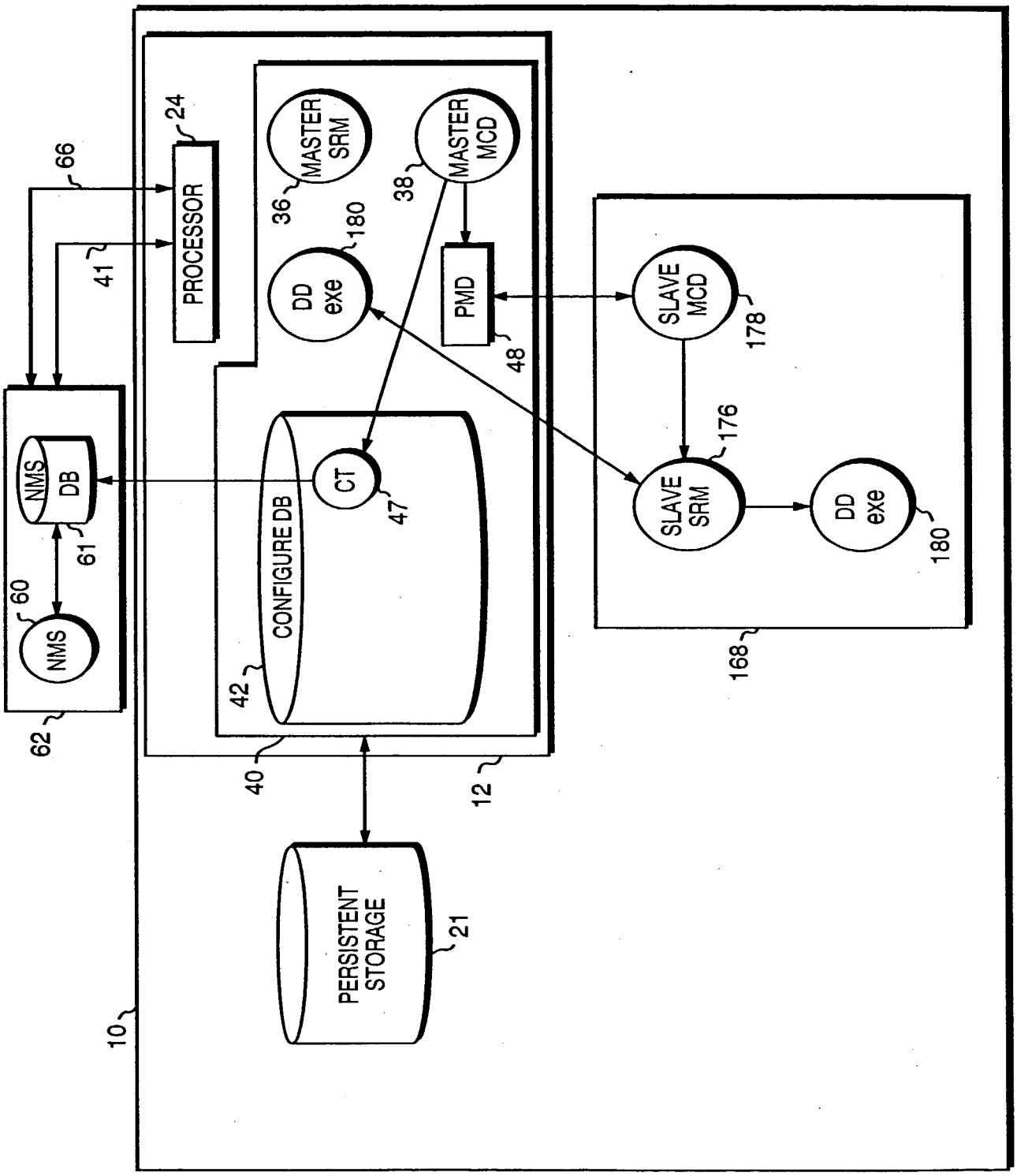

10
12
24
PROCESSOR
66
41
MASTER SRM
36
MASTER MCD
38
DD exe
180
PMD
48
CONFIGURE DB
42
CT
47
40
NMS DB
61
NMS
60
62
PERSISTENT STORAGE
21
SLAVE MCD
178
SLAVE SRM
176
DD exe
180
168

FIG. 19

PACKAGING LIST 1200

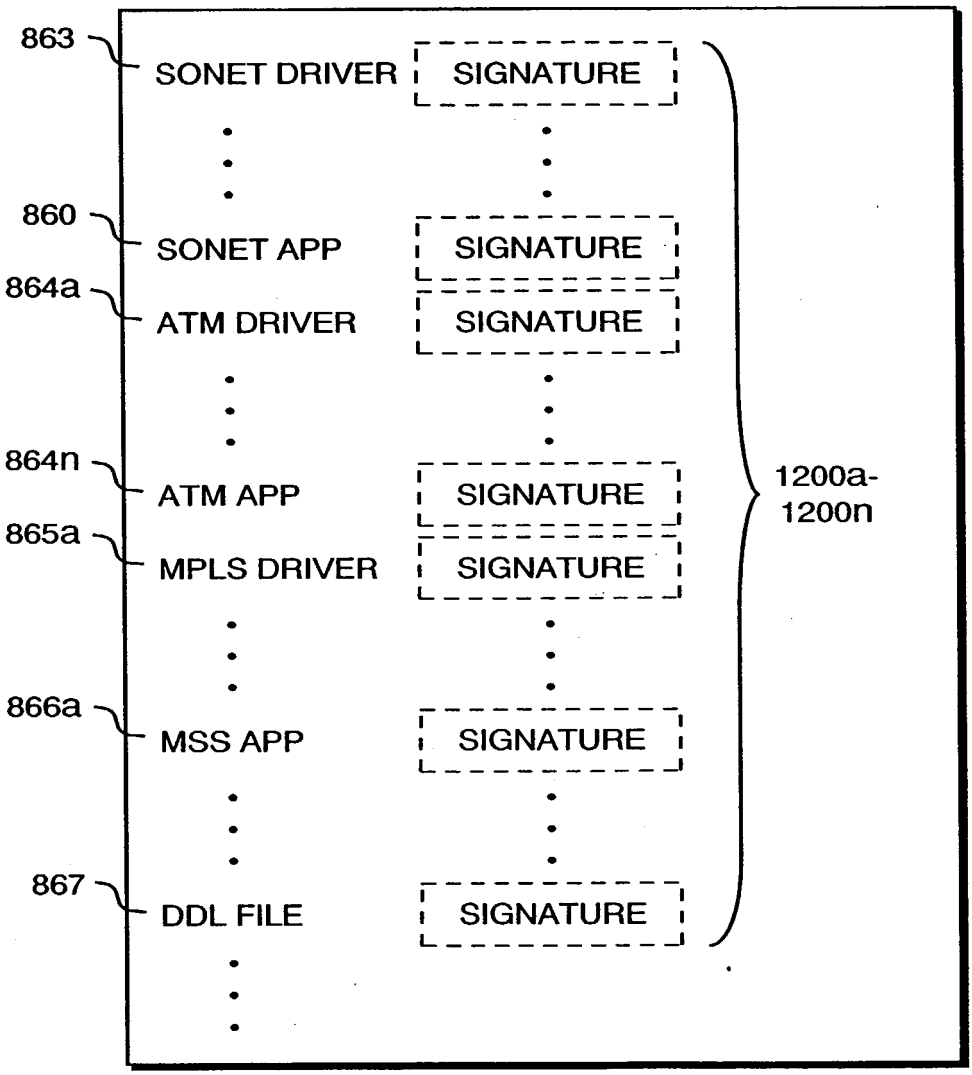


FIG. 20A

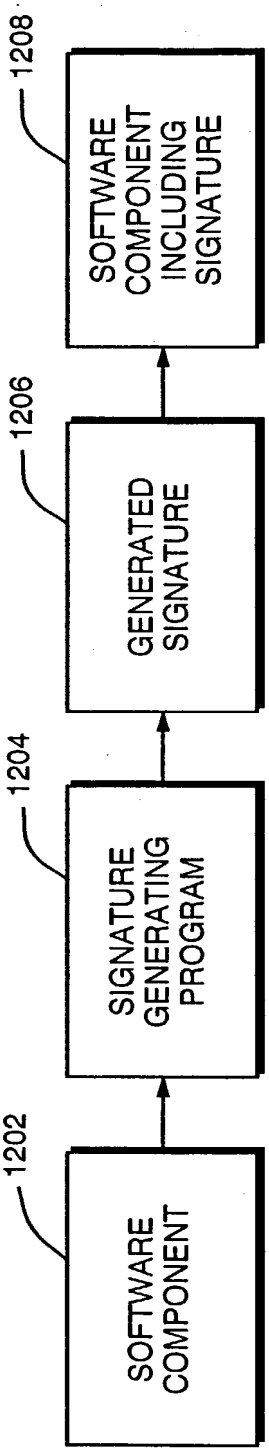

1202
SOFTWARE COMPONENT
1204
SIGNATURE GENERATING PROGRAM
1206
GENERATED SIGNATURE
1208
SOFTWARE COMPONENT INCLUDING SIGNATURE

FIG. 20B

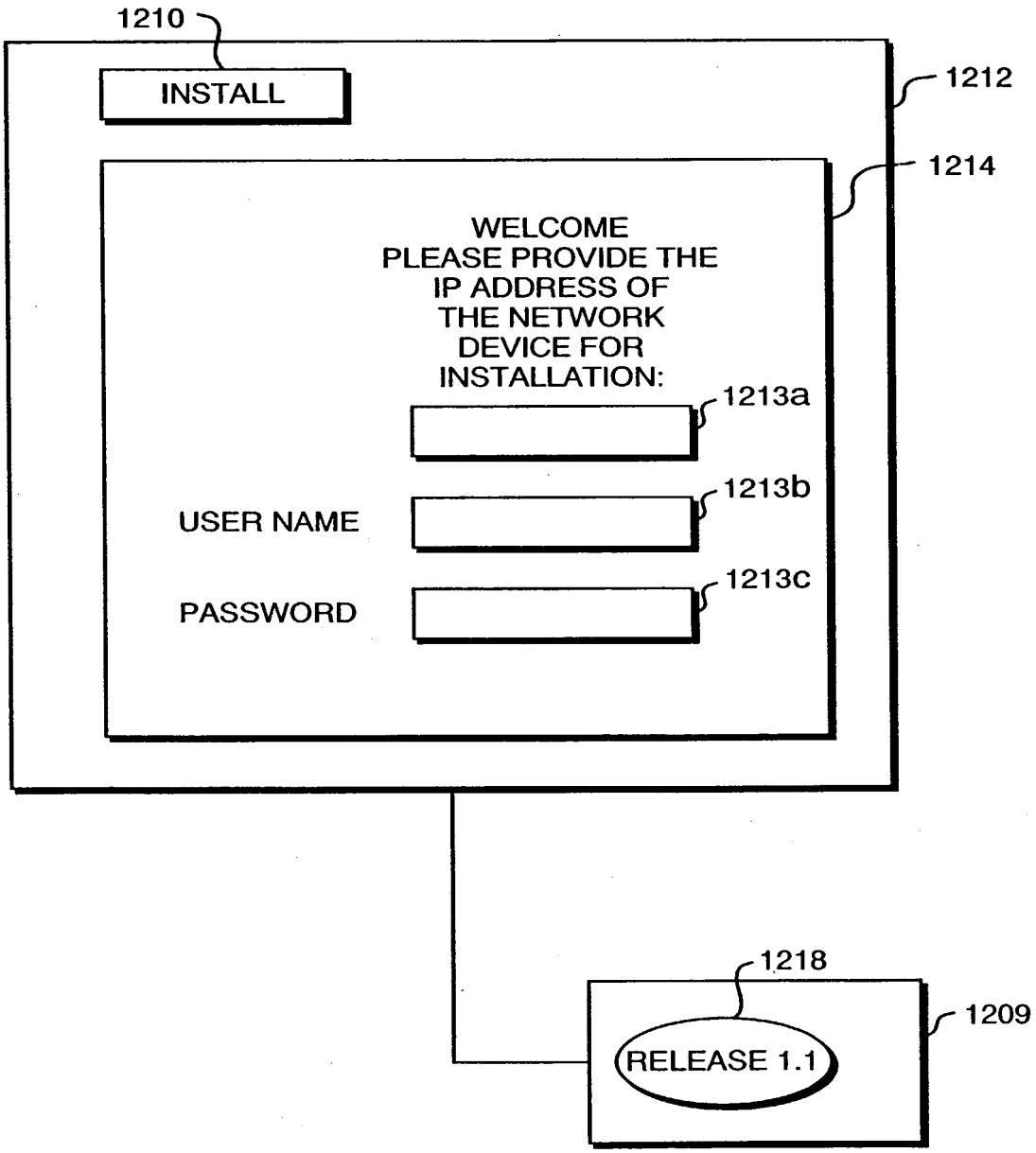

1210
INSTALL
1212
1214
WELCOME
PLEASE PROVIDE THE
IP ADDRESS OF
THE NETWORK
DEVICE FOR
INSTALLATION:
1213a
USER NAME
1213b
PASSWORD
1213c
1218
RELEASE 1.1
1209

FIG. 20C

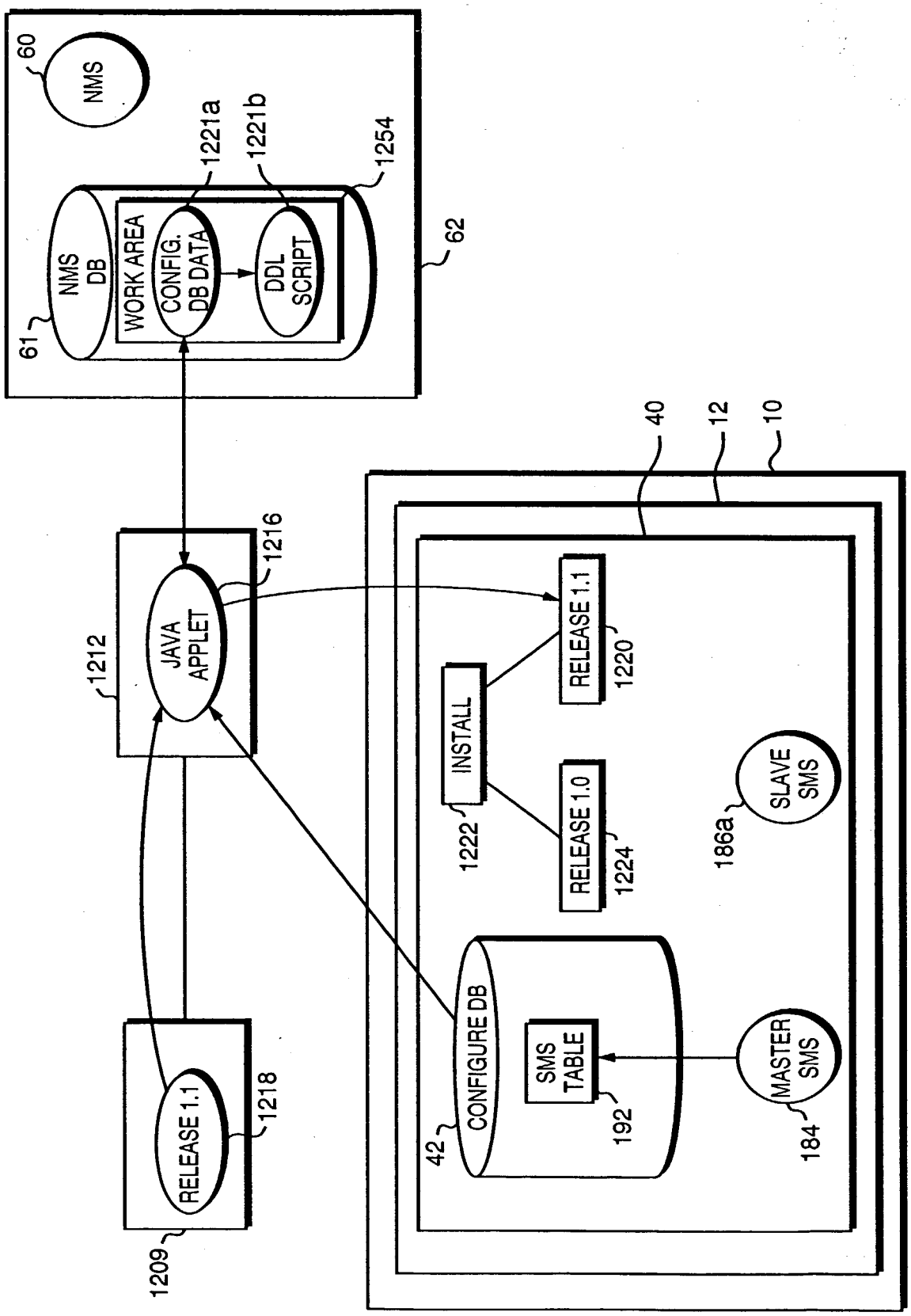

60
NMS
1221a
1221b
1254
NMS DB
WORK AREA
CONFIG. DB DATA
DDL SCRIPT
61
62
40
12
10
1216
1212
JAVA APPLET
RELEASE 1.1
1220
INSTALL
1222
RELEASE 1.0
1224
SLAVE SMS
186a
CONFIGURE DB
SMS TABLE
192
42
MASTER SMS
184
RELEASE 1.1
1218
1209

FIG. 20D

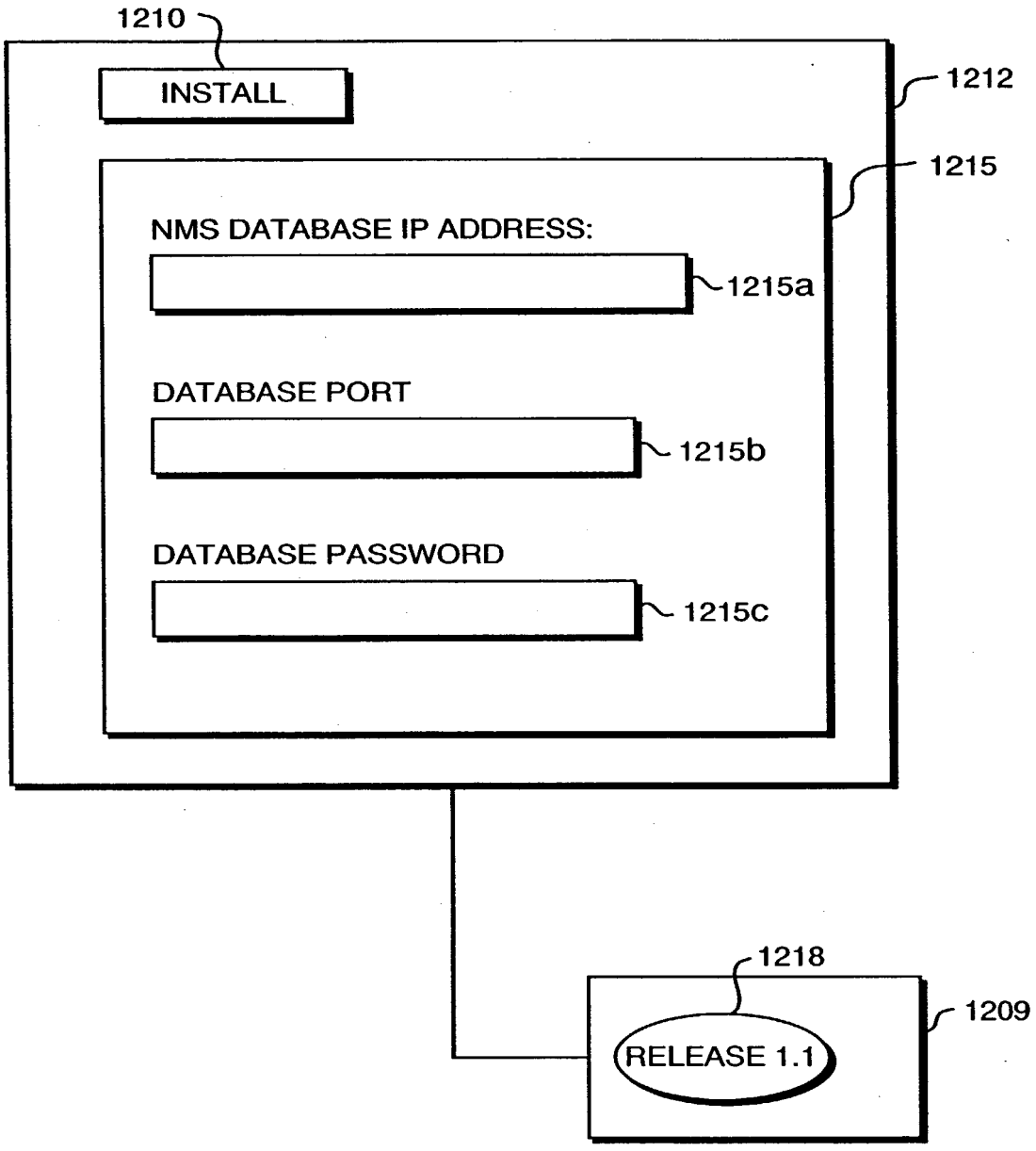

1210
INSTALL
1212
1215
NMS DATABASE IP ADDRESS:
1215a
DATABASE PORT
1215b
DATABASE PASSWORD
1215c
1218
RELEASE 1.1
1209

FIG. 20E

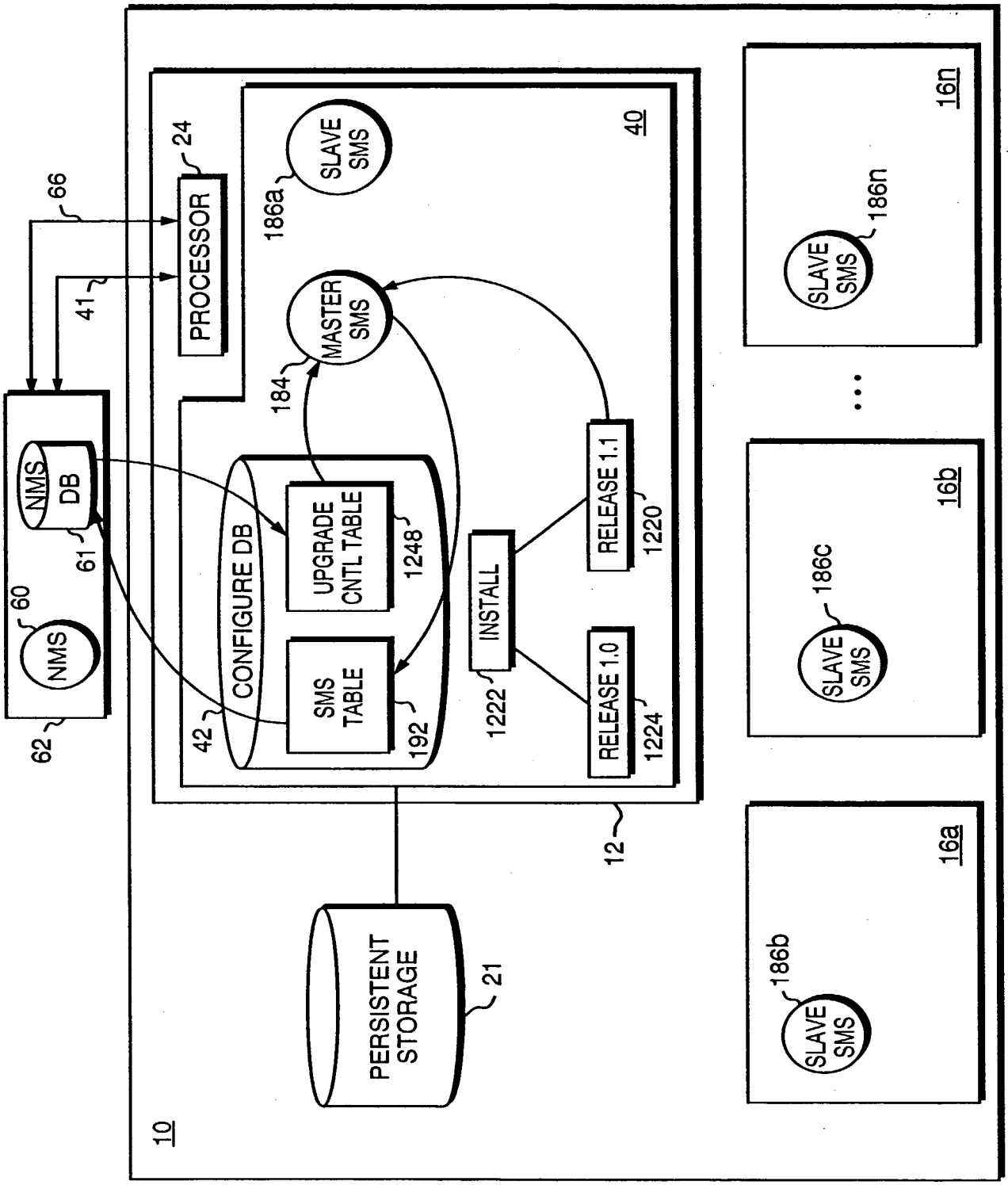

10
12
40
42
24
PROCESSOR
66
41
NMS
DB
61
60
NMS
62
CONFIGURE DB
UPGRADE CNTL TABLE
1248
SMS TABLE
192
184
MASTER SMS
186a
SLAVE SMS
INSTALL
1222
RELEASE 1.1
1220
RELEASE 1.0
1224
PERSISTENT STORAGE
21
16a
186b
SLAVE SMS
16b
186c
SLAVE SMS
16n
186n
SLAVE SMS

FIG. 21A

SMS TABLE 192

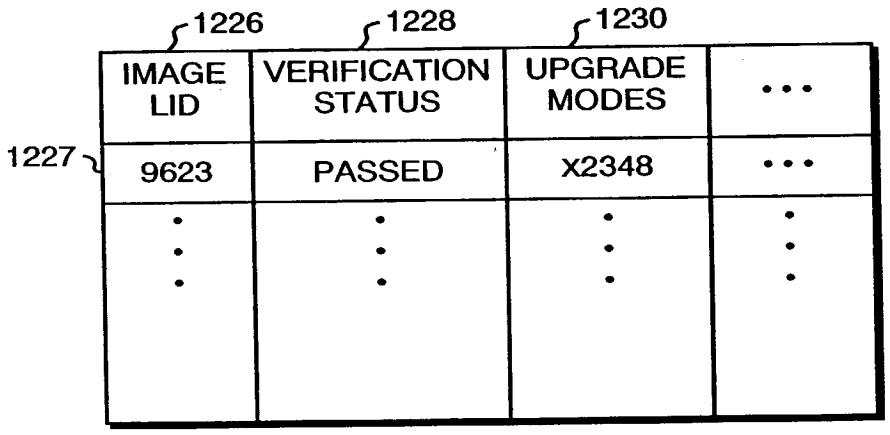


FIG. 21B

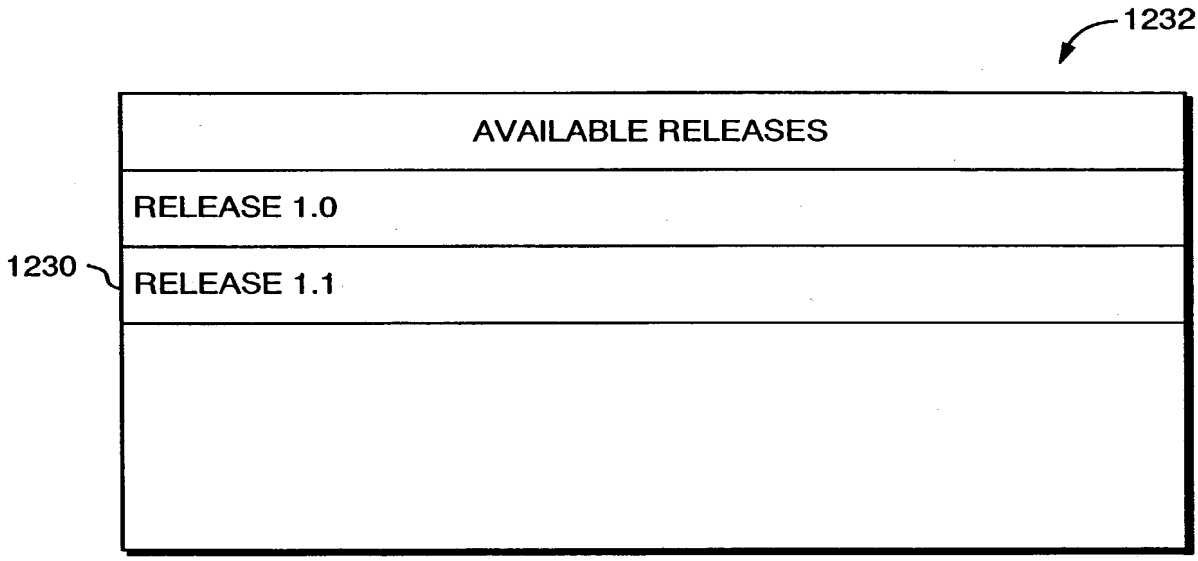


FIG. 21C

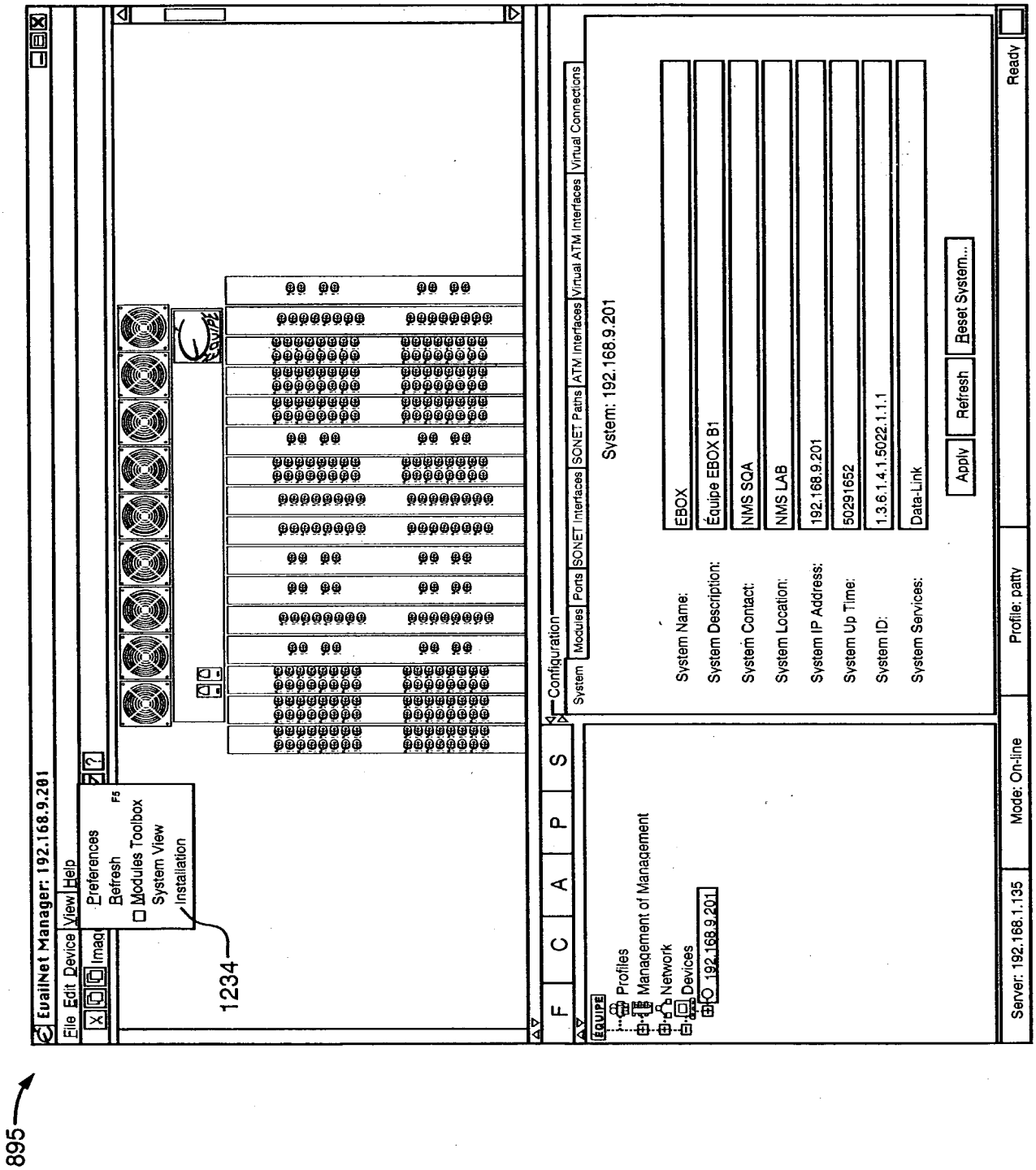

895
EvalNet Manager: 192.168.9.201
File Edit Device View Help
Preferences
Refresh
Modules Toolbox
System View
Installation
F5
1234
F C A P S
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.201
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.201
System Name: EBOX
System Description: Equipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.201
System Up Time: 50291652
System ID: 1.3.6.1.4.1.5022.1.1.1
System Services: Data-Link
Apply
Refresh
Reset System...
Server: 192.168.1.135
Mode: On-line
Profile: patty
Ready

FIG. 21D

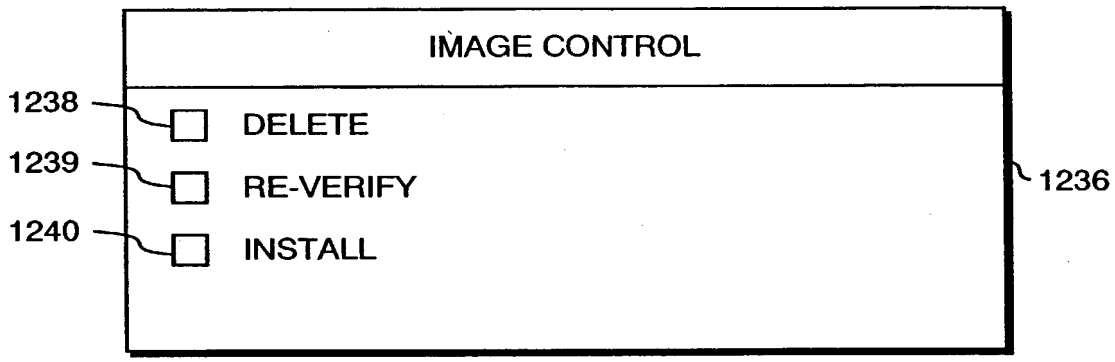


FIG. 21E

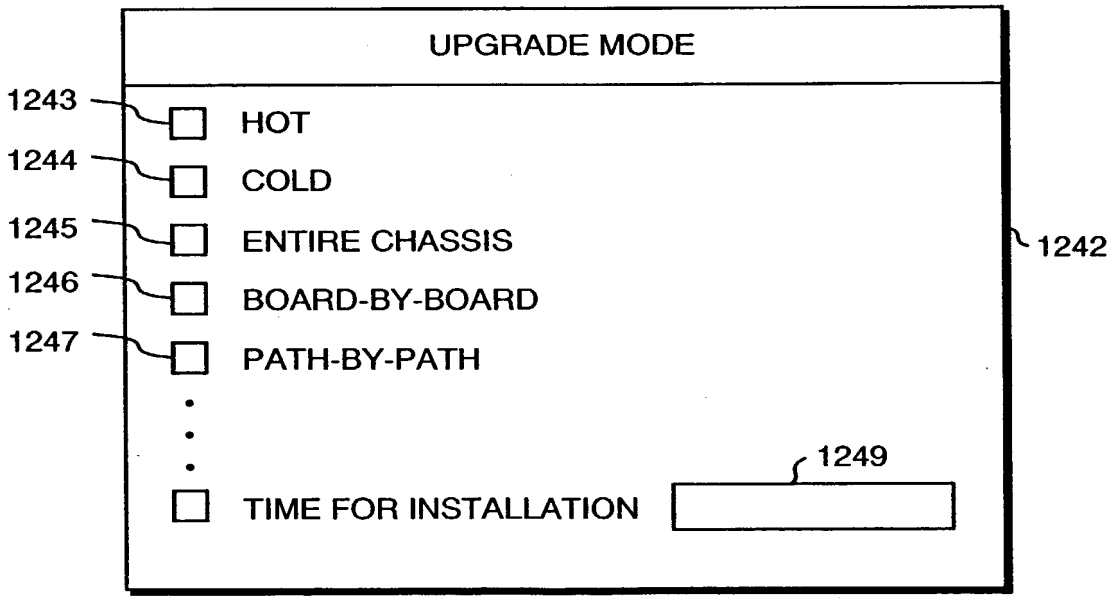


FIG. 21F

UPGRADE CONTROL TABLE 1248

	IMAGE LID (1252)	COMMAND (1253)	TIME FOR INSTALLATION (1255)	STATUS	...
1250					
1251	9623	X2344			...
	⋮	⋮	⋮	⋮	⋮

FIG. 21G

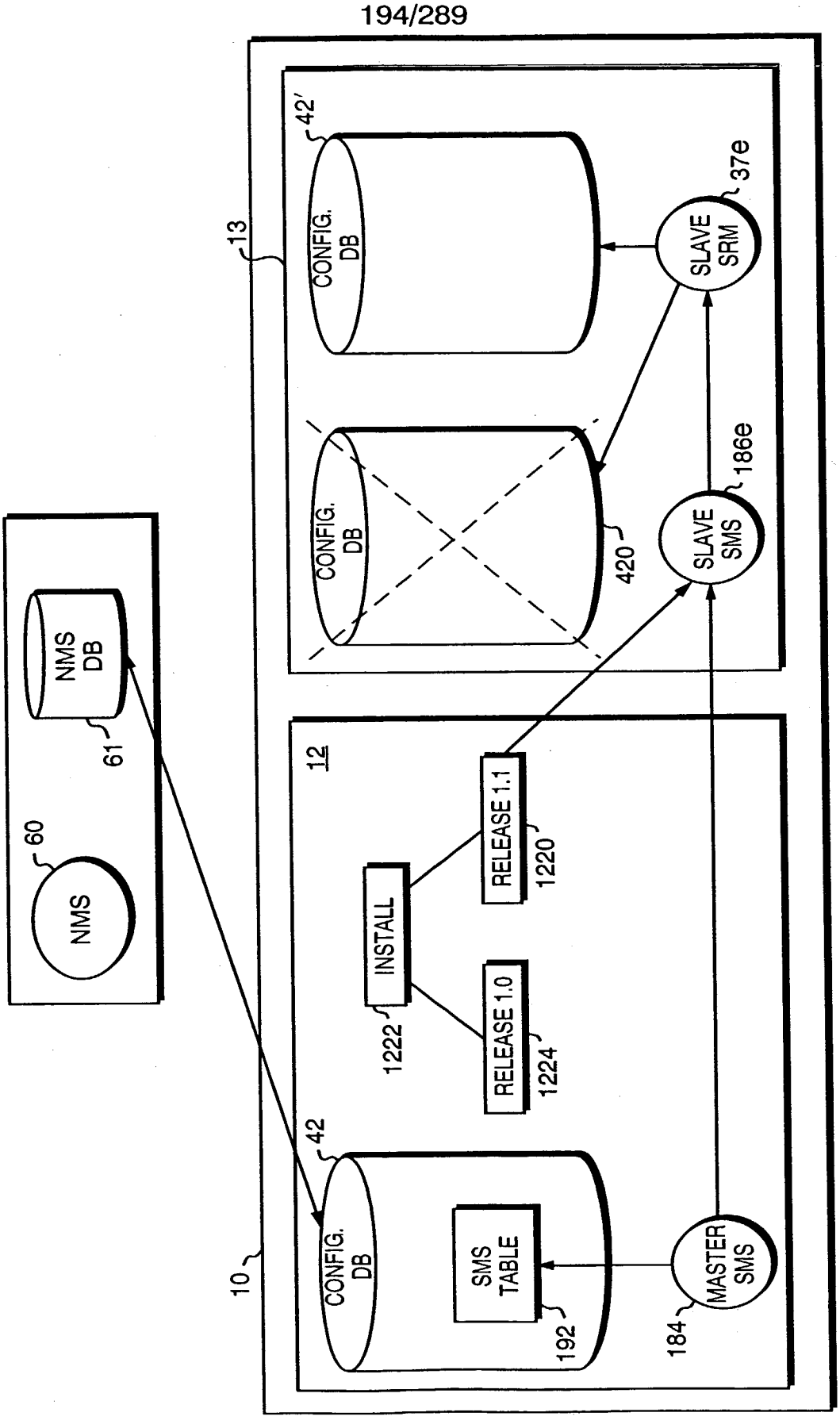

194/289
NMS
60
NMS DB
61
10
CONFIG. DB
42
SMS TABLE
192
12
INSTALL
1222
RELEASE 1.0
1224
RELEASE 1.1
1220
MASTER SMS
184
13
CONFIG. DB
420
SLAVE SMS
186e
CONFIG. DB
42'
SLAVE SRM
37e

FIG. 22

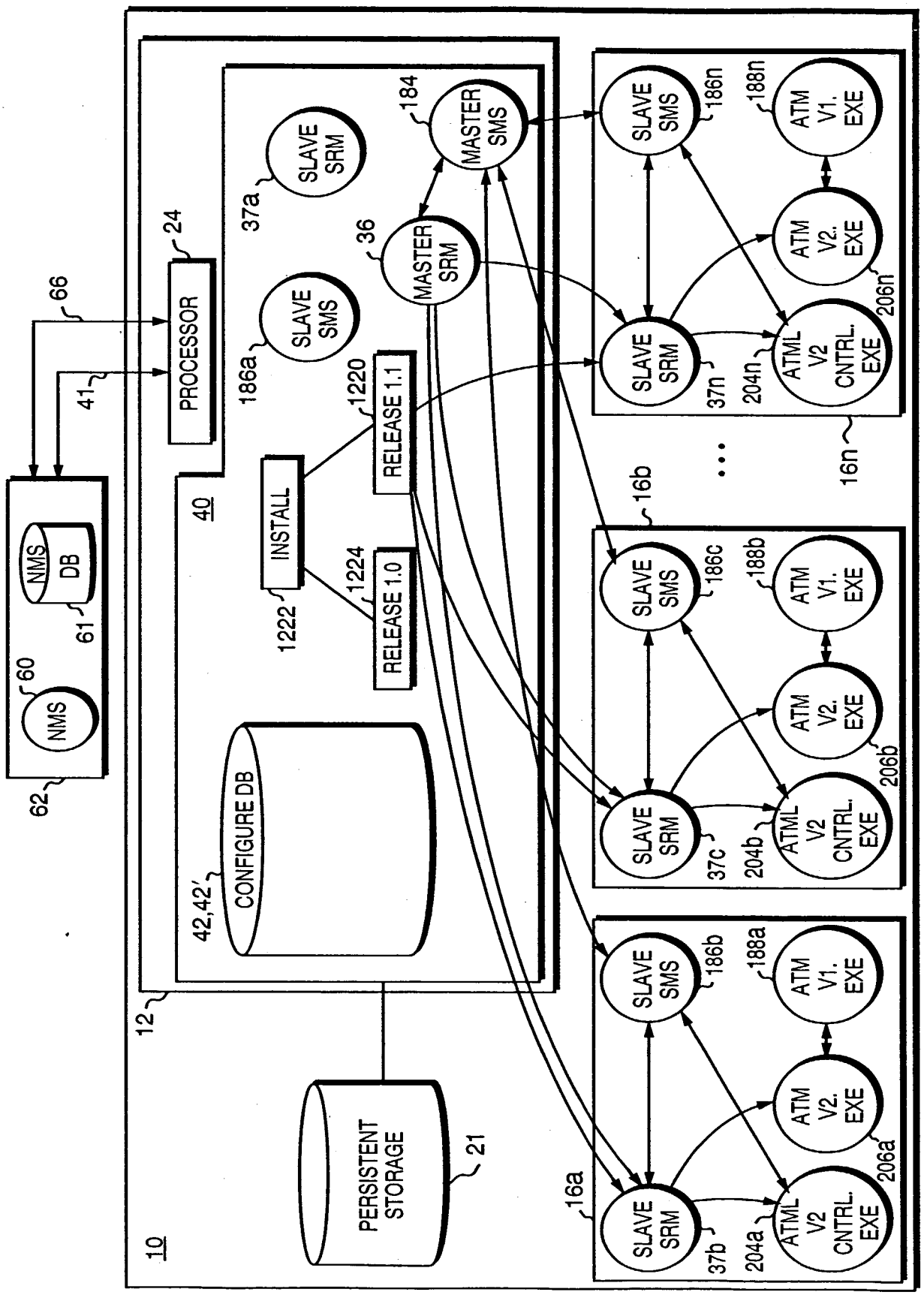

10
12
PERSISTENT STORAGE
21
40
42,42'
CONFIGURE DB
INSTALL
1222
RELEASE 1.0
1224
RELEASE 1.1
1220
PROCESSOR
24
41
66
NMS
60
62
NMS
DB
61
SLAVE SMS
186a
SLAVE SRM
37a
MASTER SRM
36
MASTER SMS
184
16a
SLAVE SRM
37b
204a
ATML V2 CNTRL. EXE
206a
ATM V2. EXE
ATM V1. EXE
SLAVE SMS
186b
188a
16b
SLAVE SRM
37c
204b
ATML V2 CNTRL. EXE
206b
ATM V2. EXE
ATM V1. EXE
SLAVE SMS
186c
188b
16n
SLAVE SRM
37n
204n
ATML V2 CNTRL. EXE
206n
ATM V2. EXE
ATM V1. EXE
SLAVE SMS
186n
188n

FIG. 23

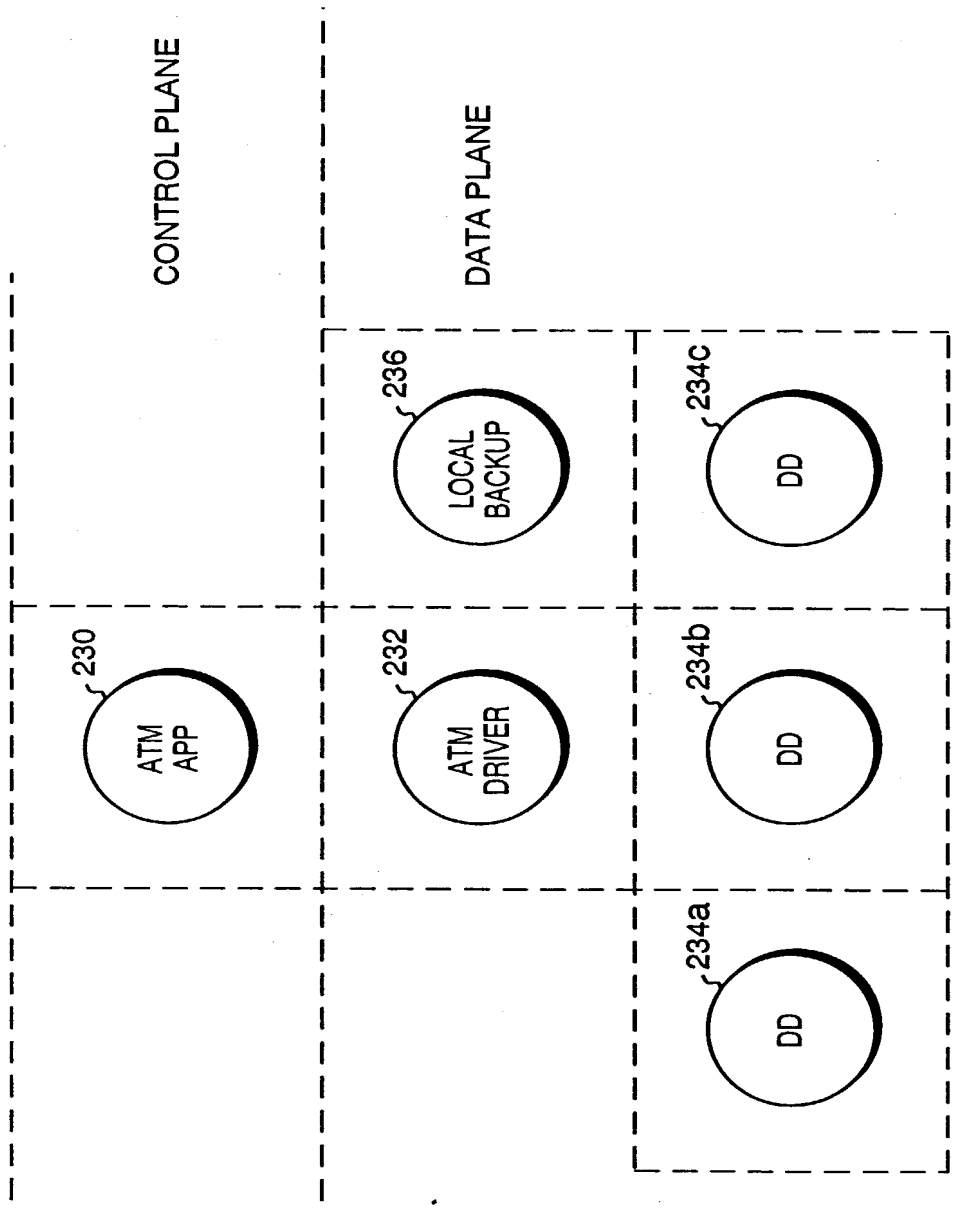

CONTROL PLANE
DATA PLANE
230
ATM APP
232
ATM DRIVER
236
LOCAL BACKUP
234a
DD
234b
DD
234c
DD

FIG. 24

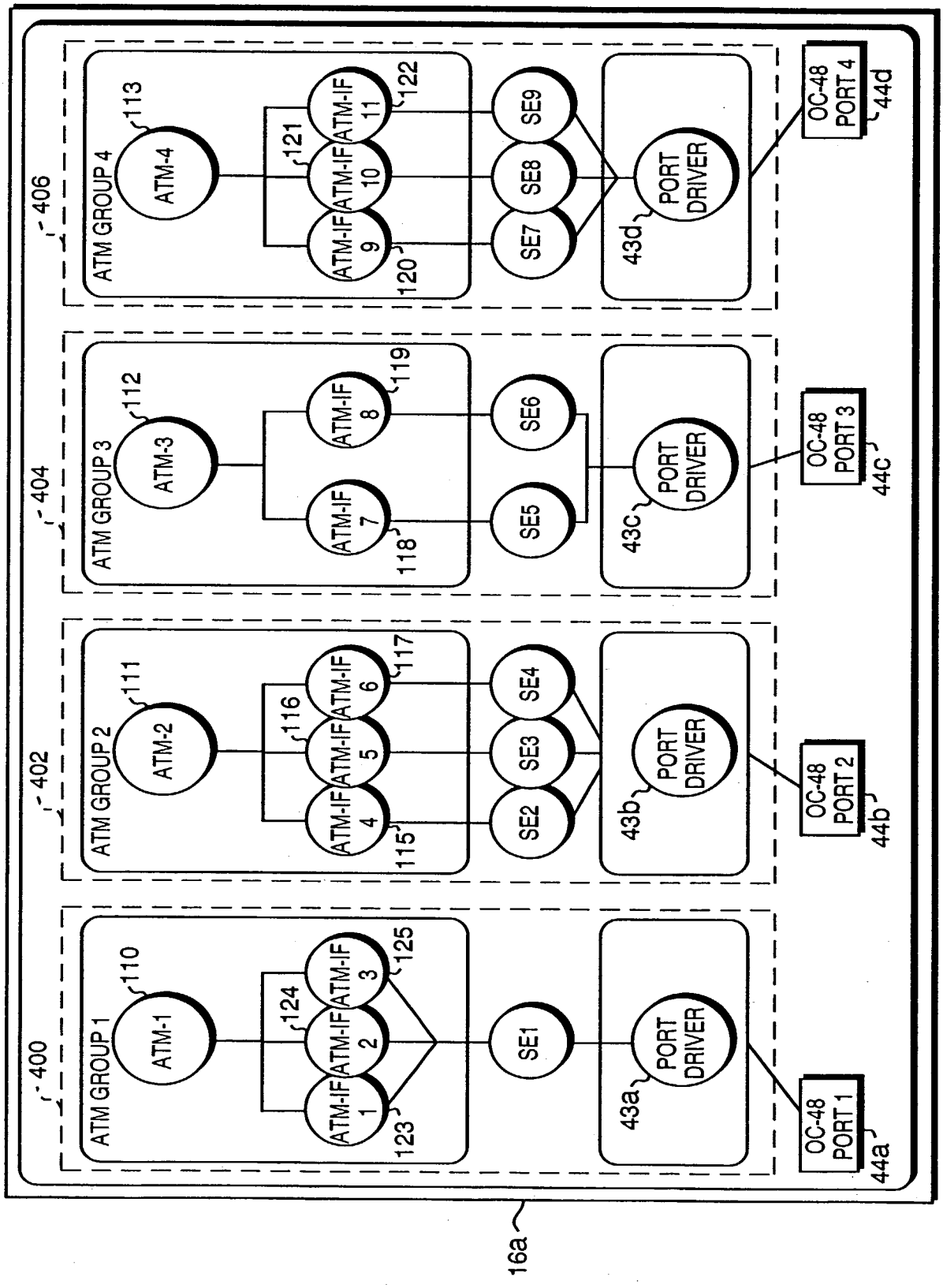

16a
400
ATM GROUP 1
ATM-1
110
ATM-IF 1
ATM-IF 2
ATM-IF 3
123
124
125
SE1
PORT DRIVER
43a
OC-48 PORT 1
44a
402
ATM GROUP 2
ATM-2
111
ATM-IF 4
ATM-IF 5
ATM-IF 6
115
116
117
SE2
SE3
SE4
PORT DRIVER
43b
OC-48 PORT 2
44b
404
ATM GROUP 3
ATM-3
112
ATM-IF 7
ATM-IF 8
118
119
SE5
SE6
PORT DRIVER
43c
OC-48 PORT 3
44c
406
ATM GROUP 4
ATM-4
113
ATM-IF 9
ATM-IF 10
ATM-IF 11
120
121
122
SE7
SE8
SE9
PORT DRIVER
43d
OC-48 PORT 4
44d

FIG. 25

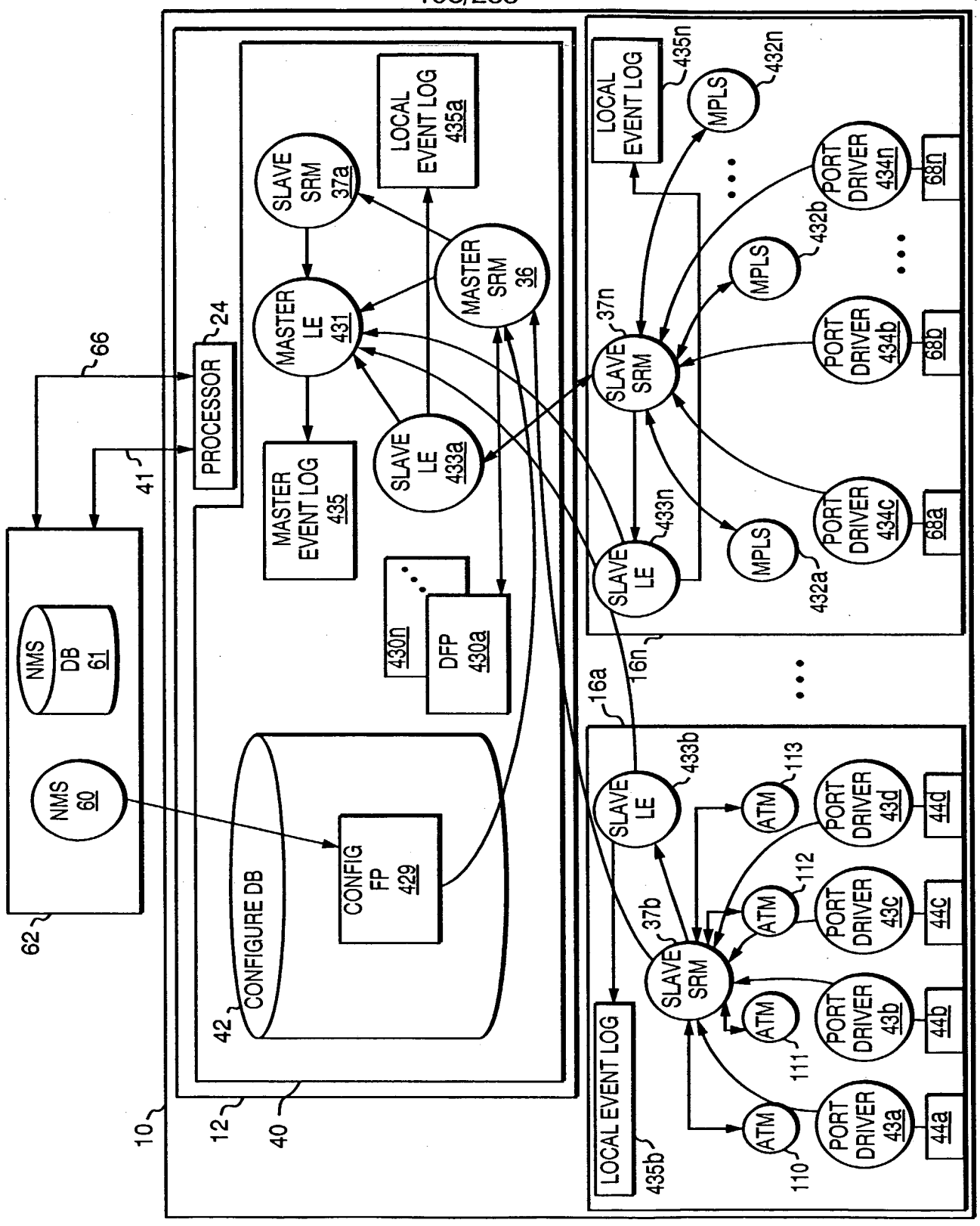

10
12
40
42
CONFIGURE DB
CONFIG FP 429
NMS 60
NMS DB 61
62
66
41
PROCESSOR
24
MASTER LE 431
MASTER SRM 36
SLAVE SRM 37a
LOCAL EVENT LOG 435a
MASTER EVENT LOG 435
SLAVE LE 433a
DFP 430a
430n
16a
16n
LOCAL EVENT LOG 435b
SLAVE LE 433b
SLAVE SRM 37b
ATM 110
ATM 111
ATM 112
ATM 113
PORT DRIVER 43a
PORT DRIVER 43b
PORT DRIVER 43c
PORT DRIVER 43d
44a
44b
44c
44d
LOCAL EVENT LOG 435n
SLAVE LE 433n
SLAVE SRM 37n
MPLS 432a
MPLS 432b
MPLS 432n
PORT DRIVER 434c
PORT DRIVER 434b
PORT DRIVER 434n
68a
68b
68n

FIG. 26

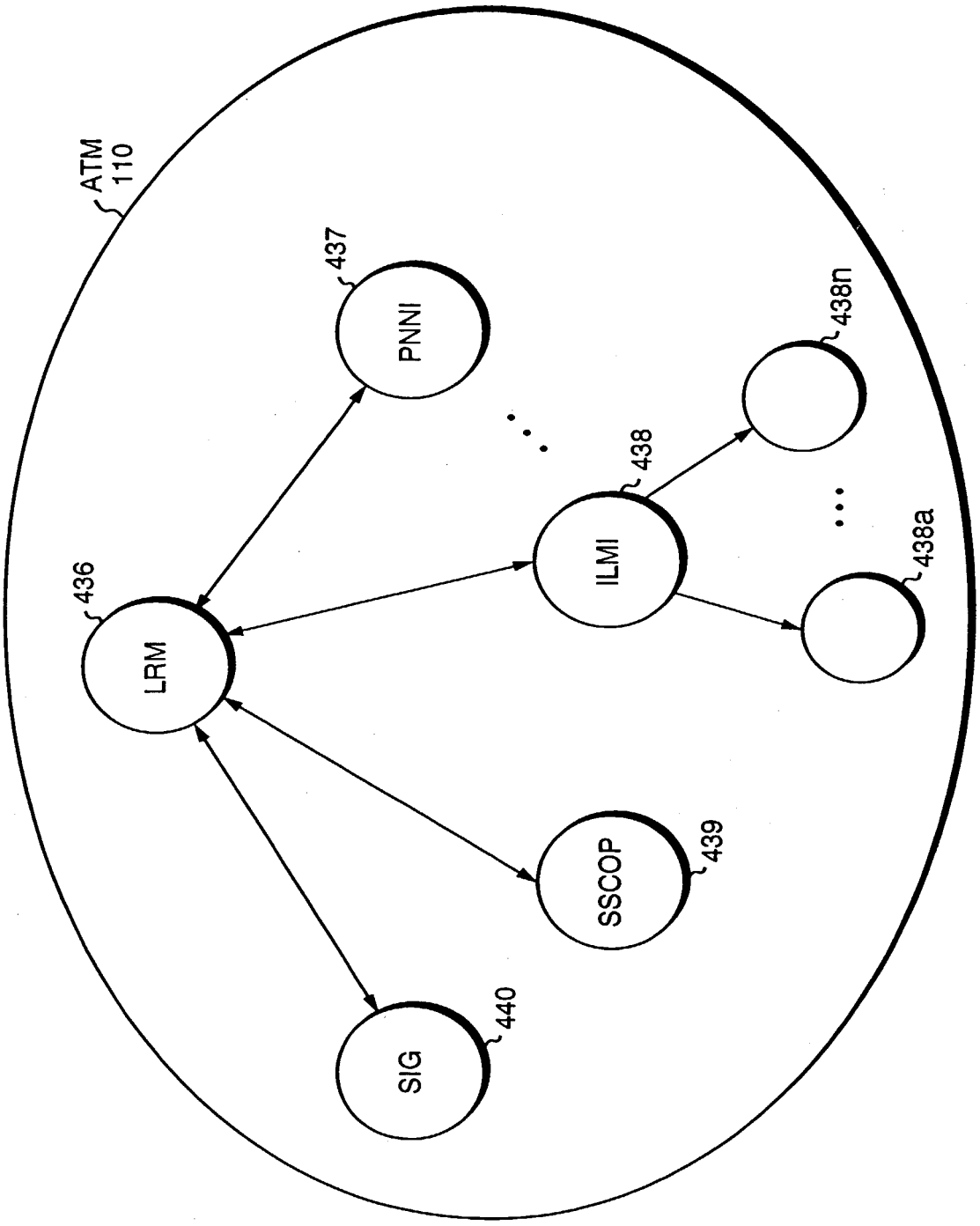


FIG. 27

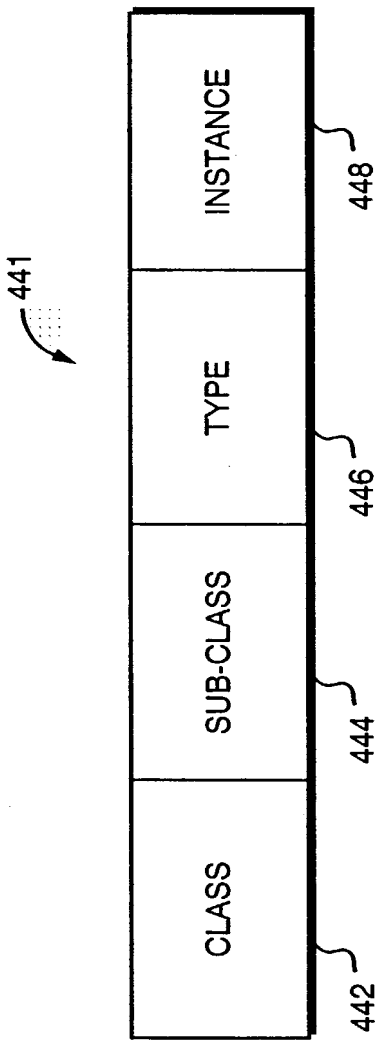


FIG. 28

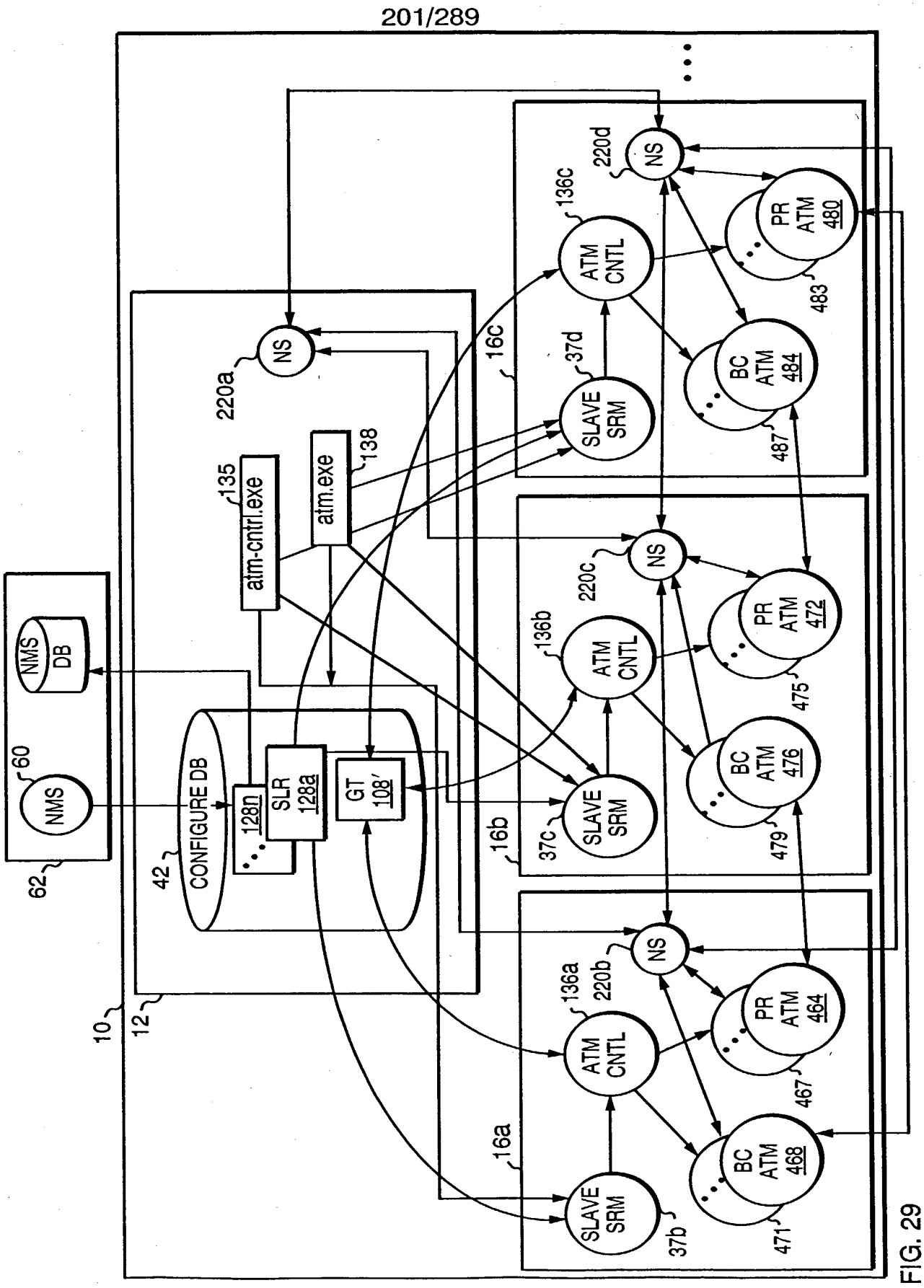

10
12
62
60
NMS
NMS DB
42
CONFIGURE DB
128n
SLR 128a
GT 108'
atm-cntrl.exe
135
atm.exe
138
220a
NS
16a
16b
16c
37b
SLAVE SRM
37c
37d
136a
136b
136c
220b
220c
220d
ATM CNTL
PR ATM 464
467
BC ATM 468
471
PR ATM 472
475
BC ATM 476
479
PR ATM 480
483
BC ATM 484
487

FIG. 29

GROUP TABLE 108'

	GROUP #	PRIMARY CARD LID (447)	BACKUP CARD LID (449)	...
450	1	30	31	
451	2	30	31	
452	3	30	31	
453	4	30	31	
454	5	31	32	
455	6	31	32	
456	7	31	32	
457	8	31	32	
458	9	32	30	
459	10	32	30	
460	11	32	30	
461	12	32	30	
	• • •	• • •	• • •	• • •

FIG. 30

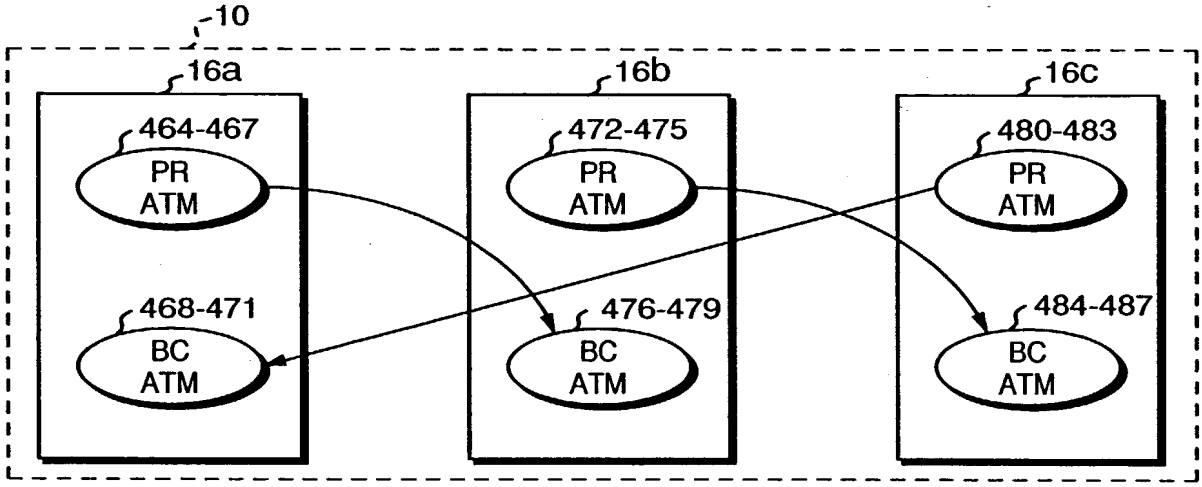


FIG. 31A

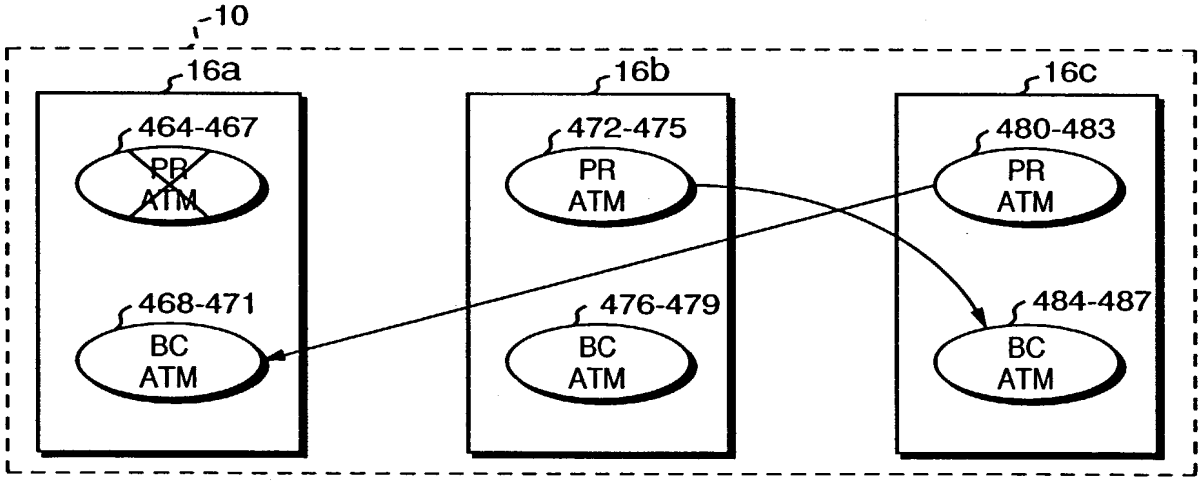


FIG. 31B

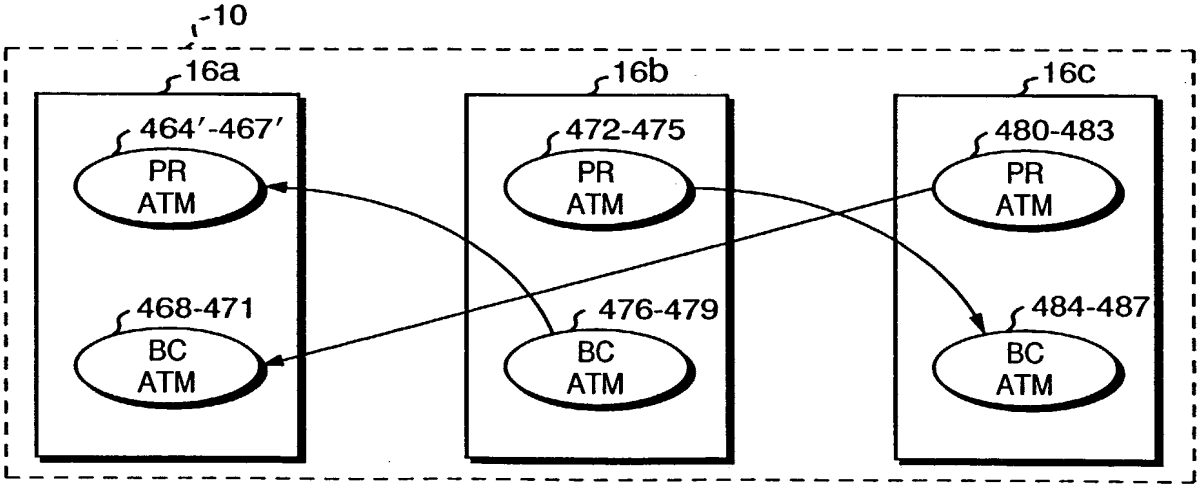


FIG. 31C

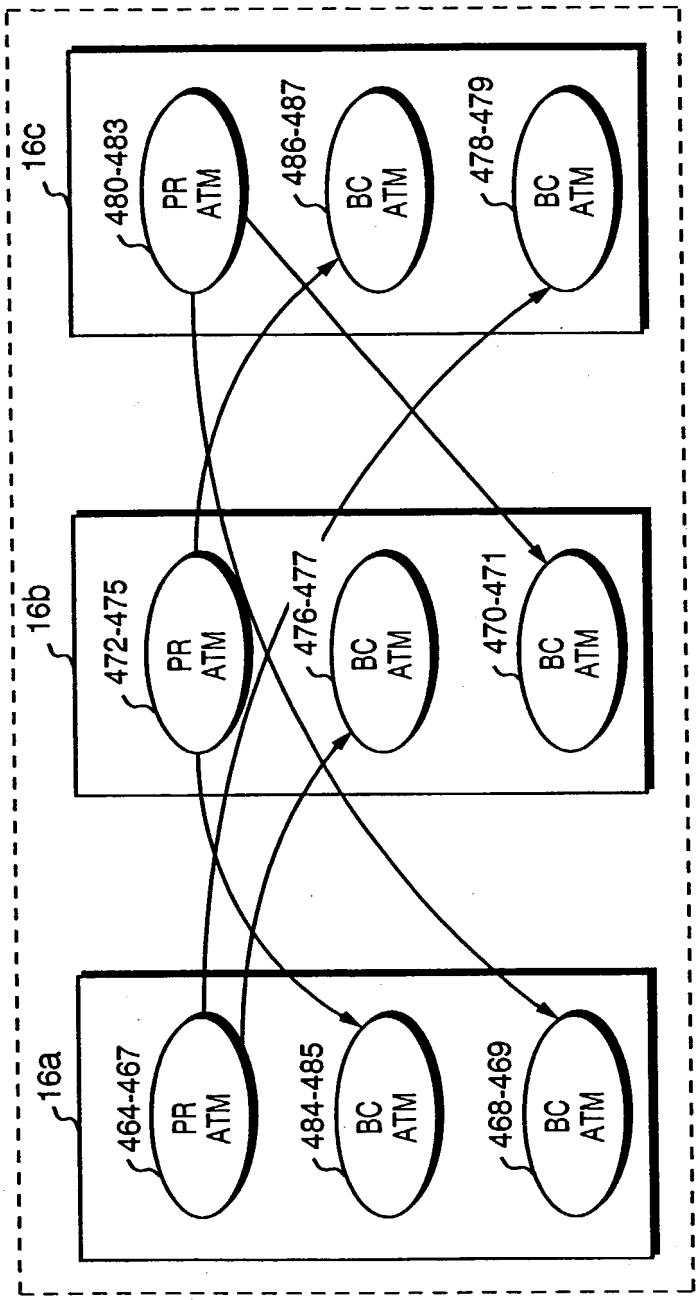

16c
480-483
PR ATM
486-487
BC ATM
478-479
BC ATM
16b
472-475
PR ATM
476-477
BC ATM
470-471
BC ATM
16a
464-467
PR ATM
484-485
BC ATM
468-469
BC ATM

FIG. 32A

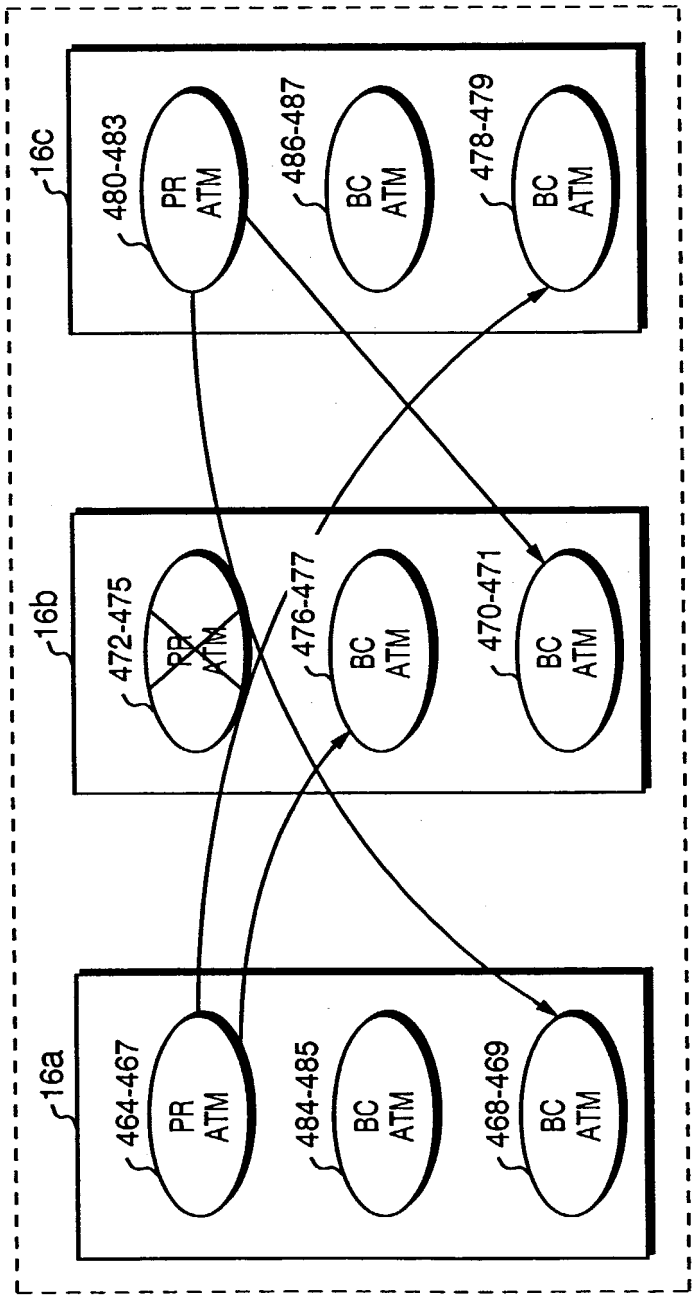

16c
480-483
PR ATM
486-487
BC ATM
478-479
BC ATM
16b
472-475
PR ATM
476-477
BC ATM
470-471
BC ATM
16a
464-467
PR ATM
484-485
BC ATM
468-469
BC ATM

FIG. 32B

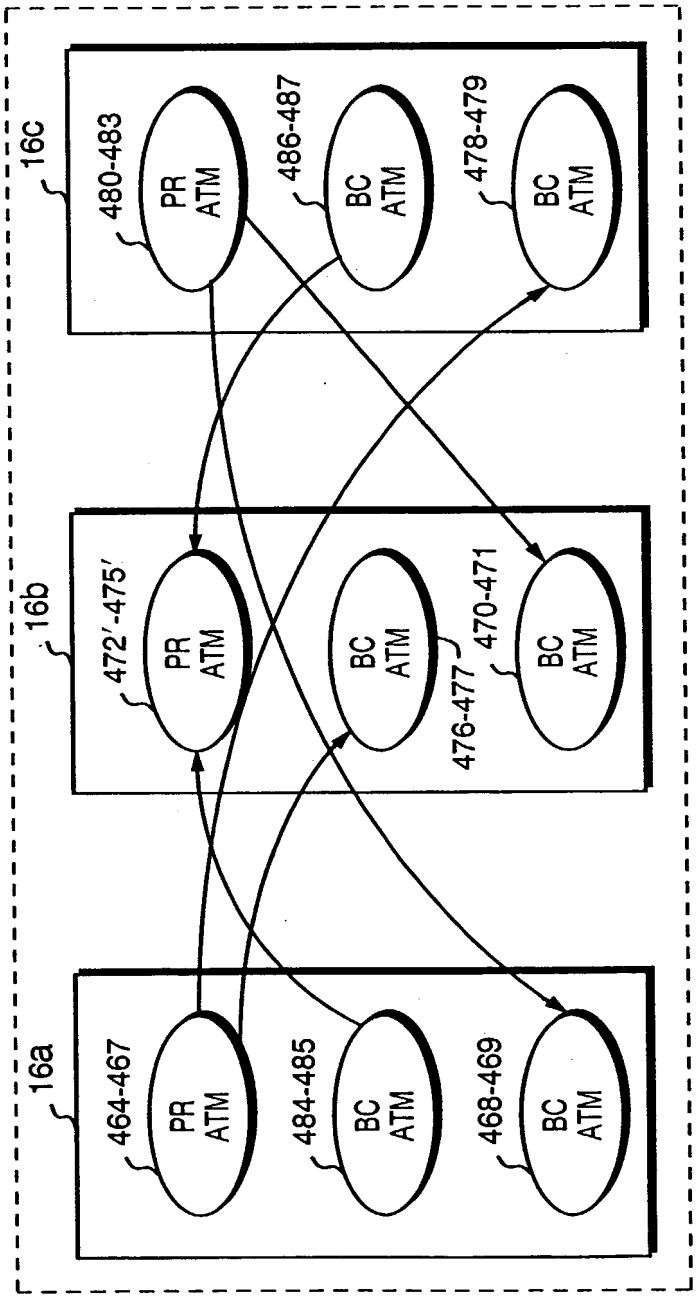

16c
480-483
PR ATM
486-487
BC ATM
478-479
BC ATM
16b
472'-475'
PR ATM
BC ATM
476-477
470-471
BC ATM
16a
464-467
PR ATM
484-485
BC ATM
468-469
BC ATM

FIG. 32C

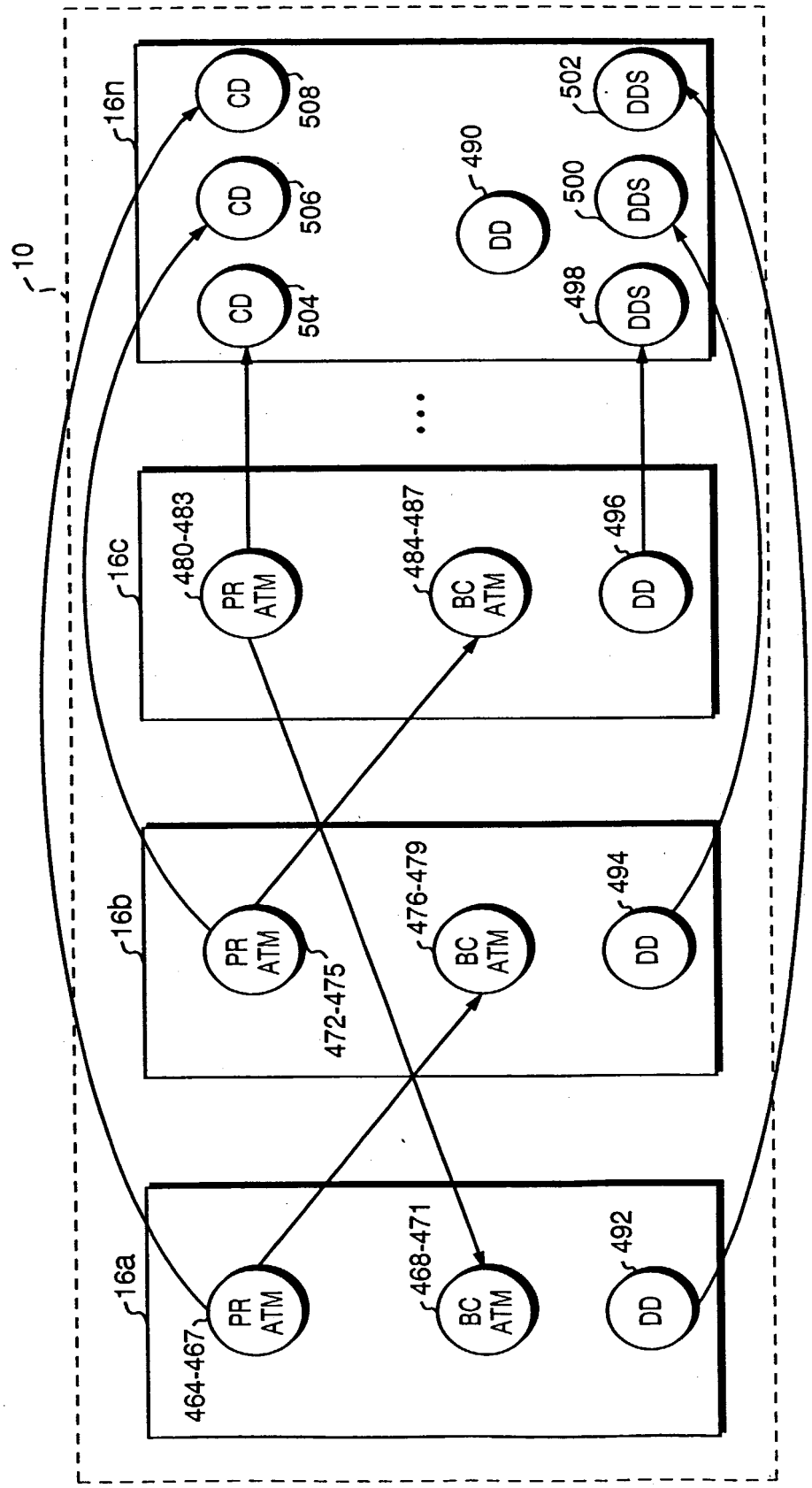

10
16n
CD
508
CD
506
CD
504
DD
490
DDS
502
DDS
500
DDS
498
16c
480-483
PR ATM
484-487
BC ATM
DD
496
16b
PR ATM
472-475
476-479
BC ATM
DD
494
16a
464-467
PR ATM
468-471
BC ATM
DD
492

FIG. 33A

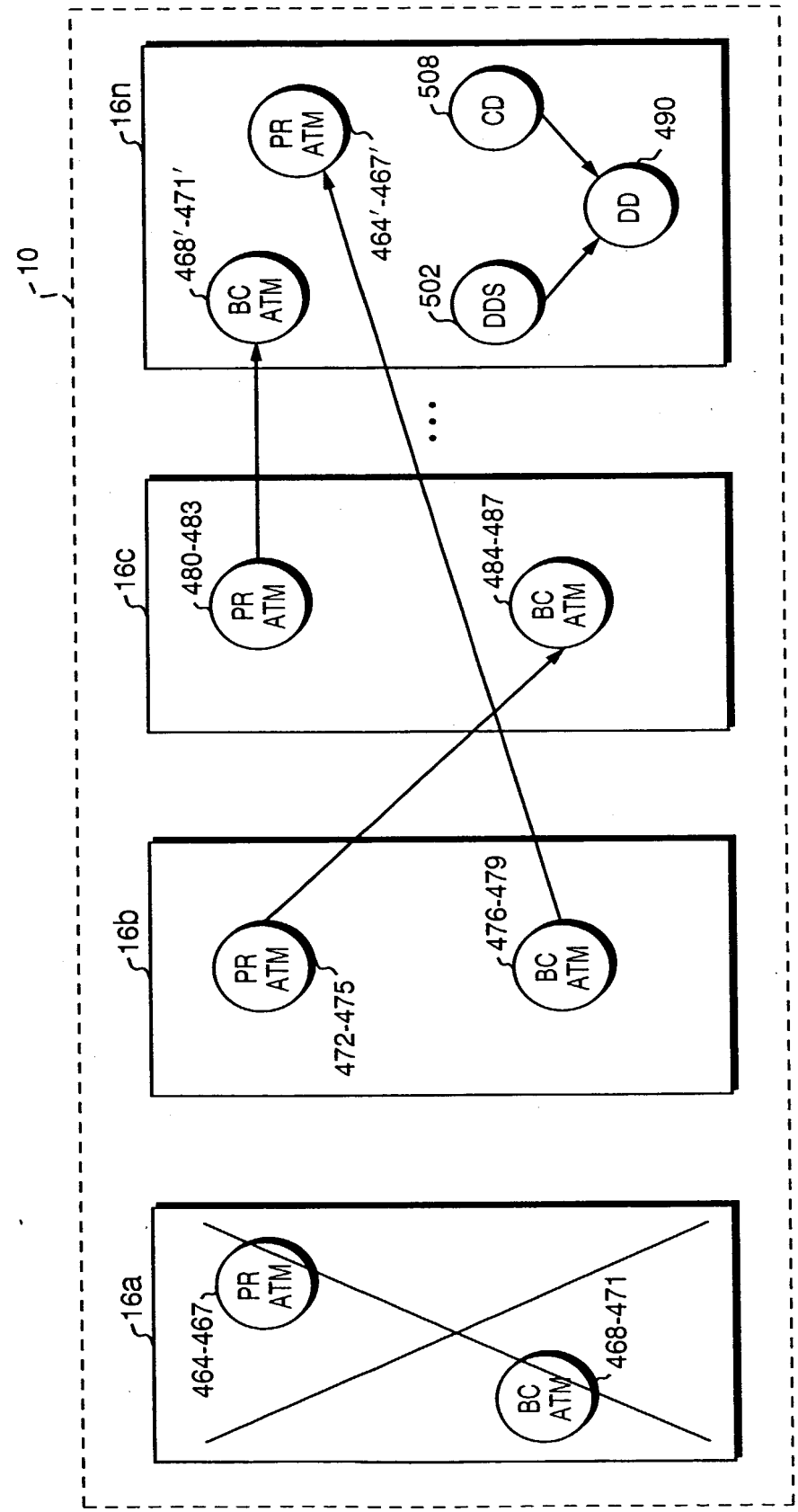

10
16a
PR ATM
464-467
BC ATM
468-471
16b
PR ATM
472-475
BC ATM
476-479
16c
PR ATM
480-483
BC ATM
484-487
16n
PR ATM
464'-467'
BC ATM
468'-471'
CD
508
DD
490
DDS
502

FIG. 33B

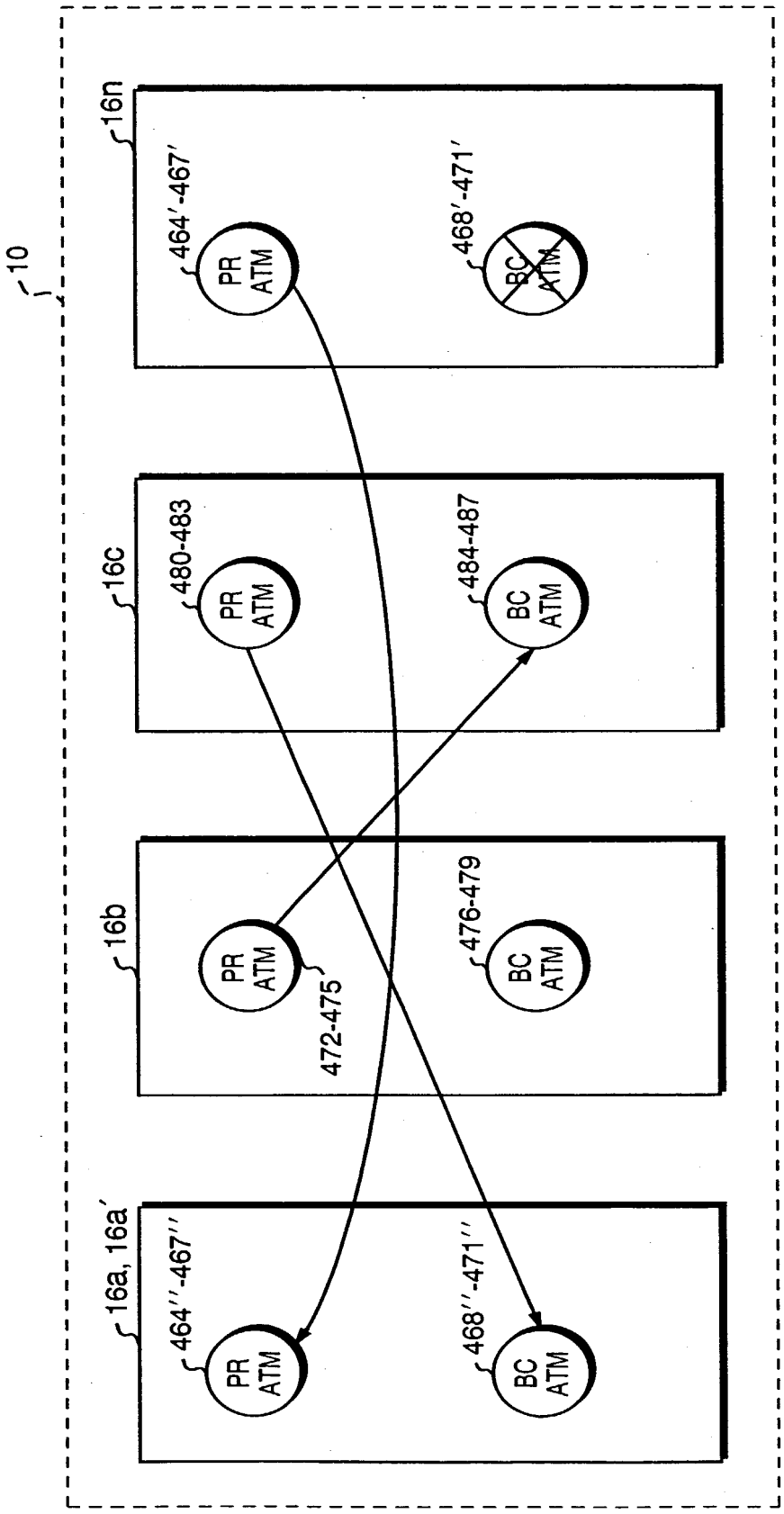

10
16n
464'-467'
PR ATM
468'-471'
BC ATM
16c
480-483
PR ATM
484-487
BC ATM
16b
PR ATM
472-475
476-479
BC ATM
16a, 16a'
464''-467''
PR ATM
468''-471''
BC ATM

FIG. 33C

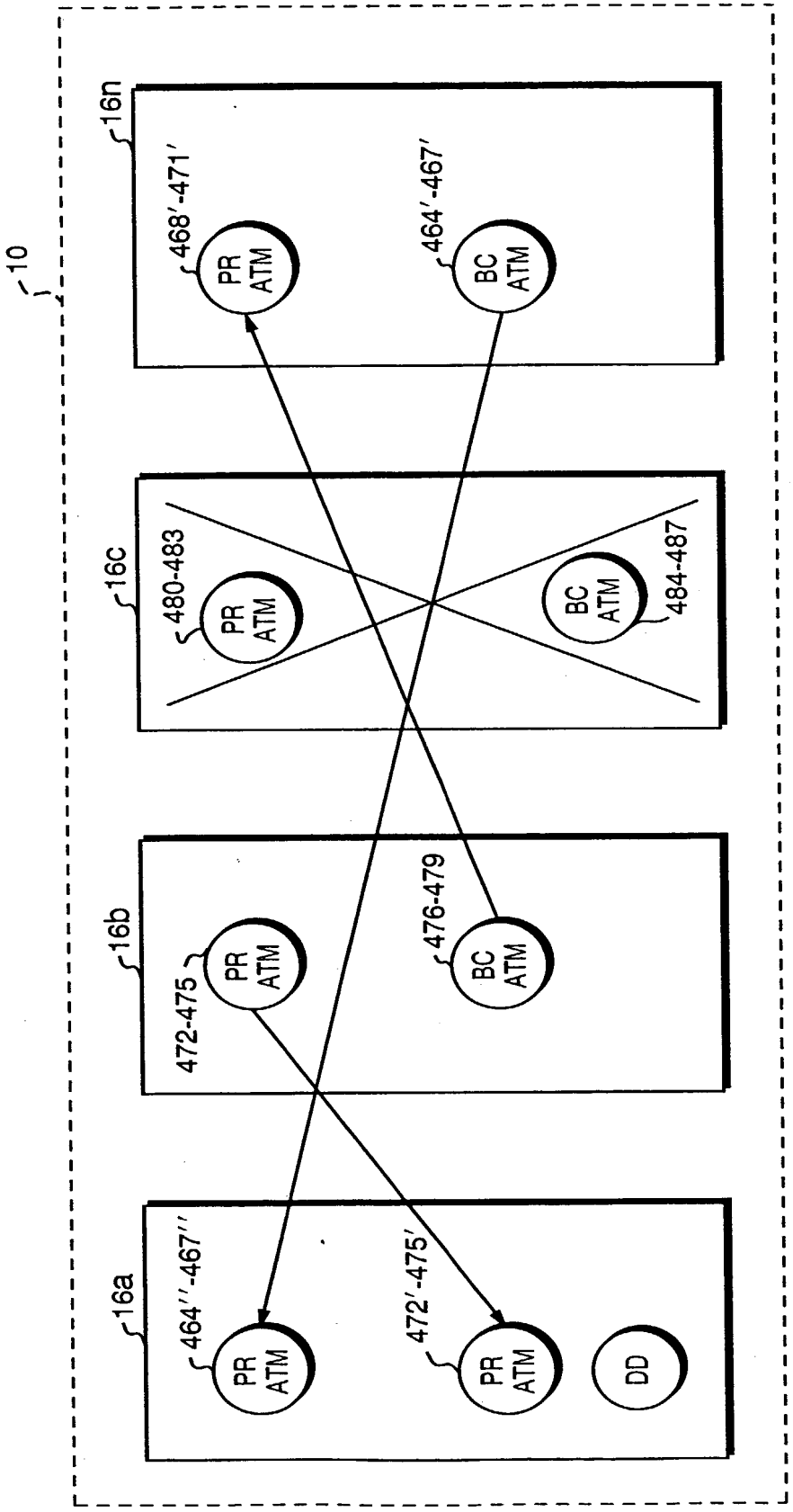

10
16n
468'-471'
PR ATM
464'-467'
BC ATM
16c
480-483
PR ATM
BC ATM
484-487
16b
472-475
PR ATM
476-479
BC ATM
16a
464''-467''
PR ATM
472'-475'
PR ATM
DD

FIG. 33D

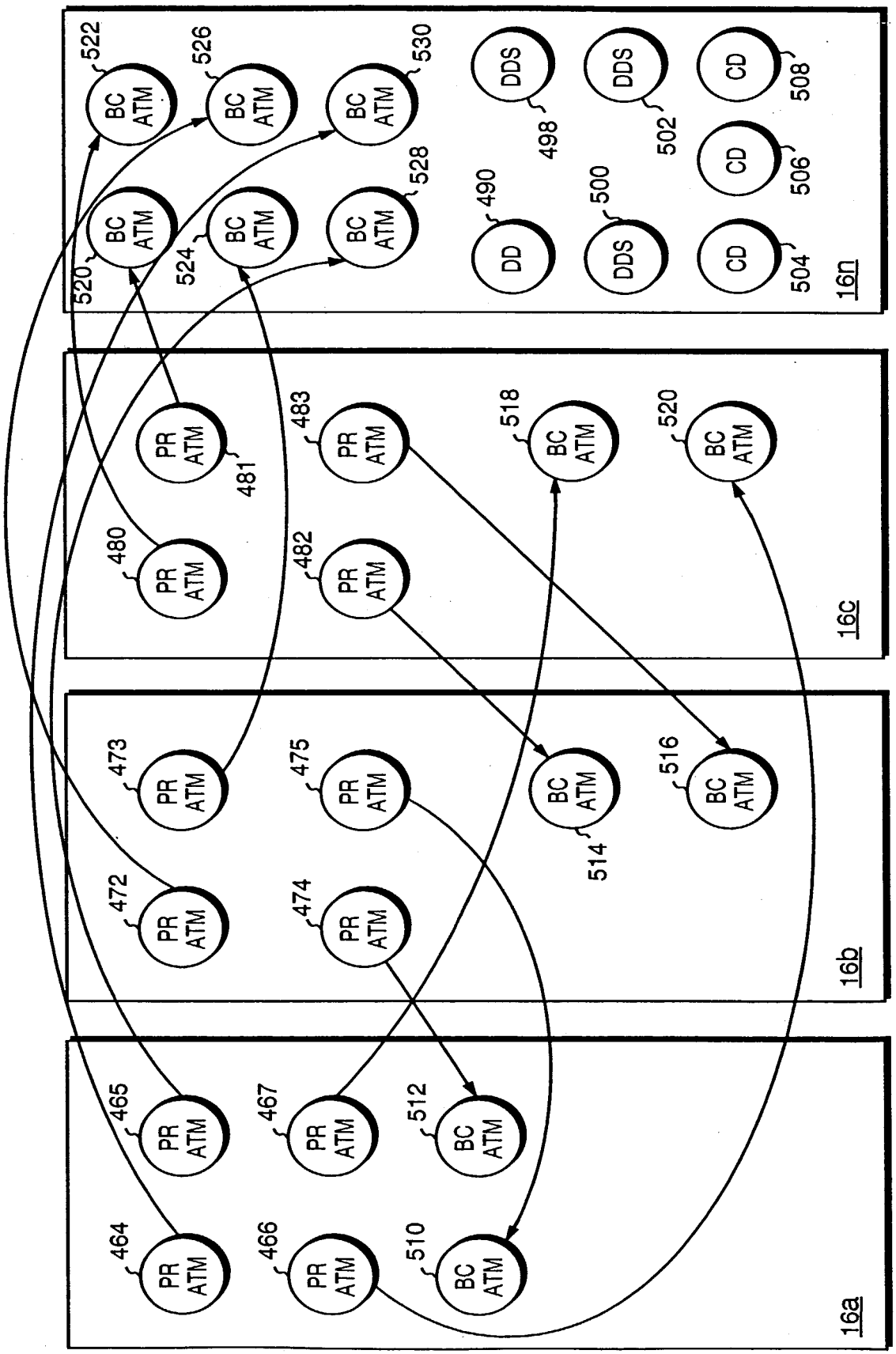

16a
16b
16c
16n
PR ATM
BC ATM
DD
DDS
CD
464
465
466
467
472
473
474
475
480
481
482
483
510
512
514
516
518
520
522
524
526
528
530
490
498
500
502
504
506
508

FIG. 34A

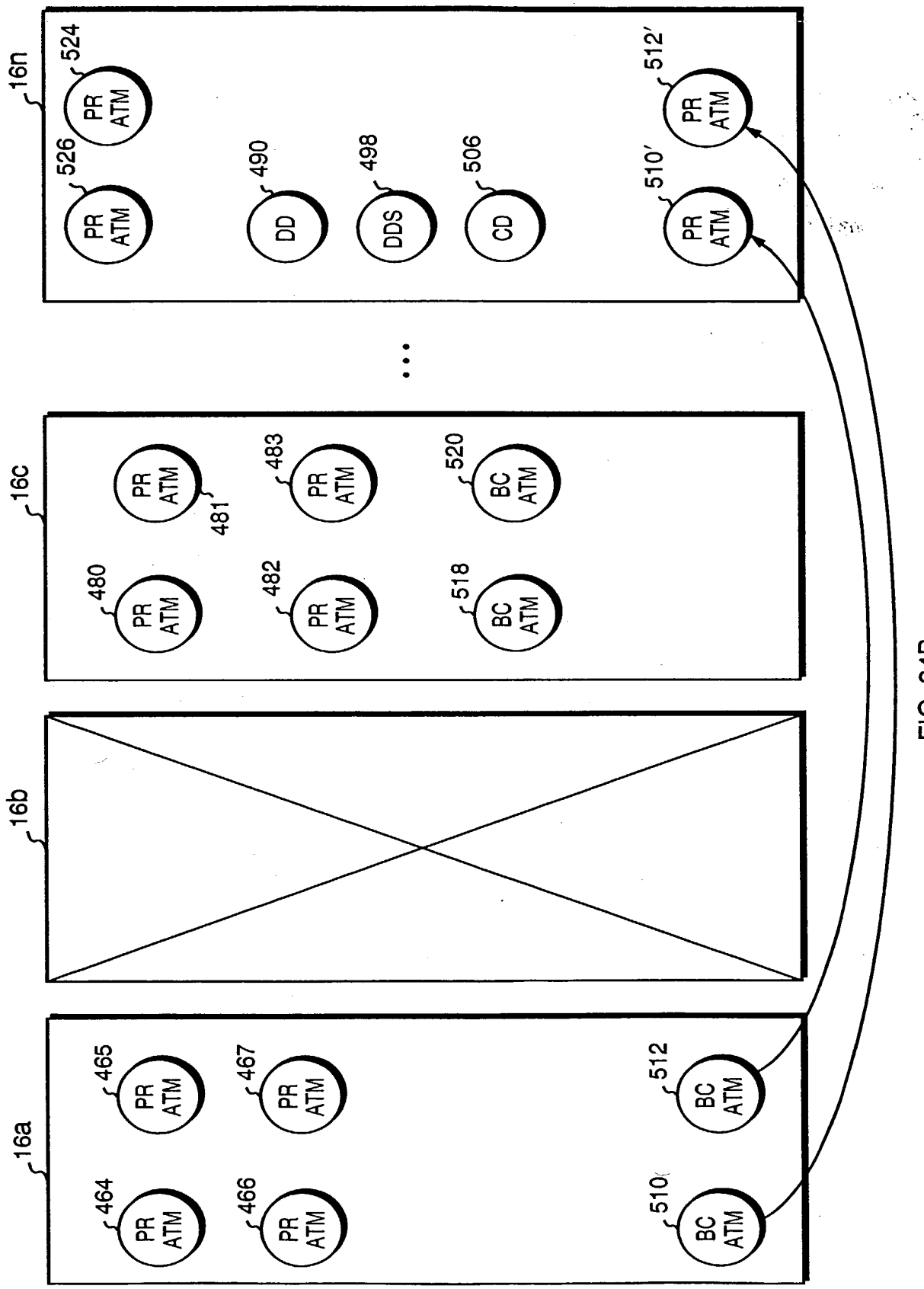

16a
16b
16c
16n
PR ATM
BC ATM
DD
DDS
CD
464
465
466
467
510
512
480
481
482
483
518
520
524
526
490
498
506
510'
512'

FIG. 34B

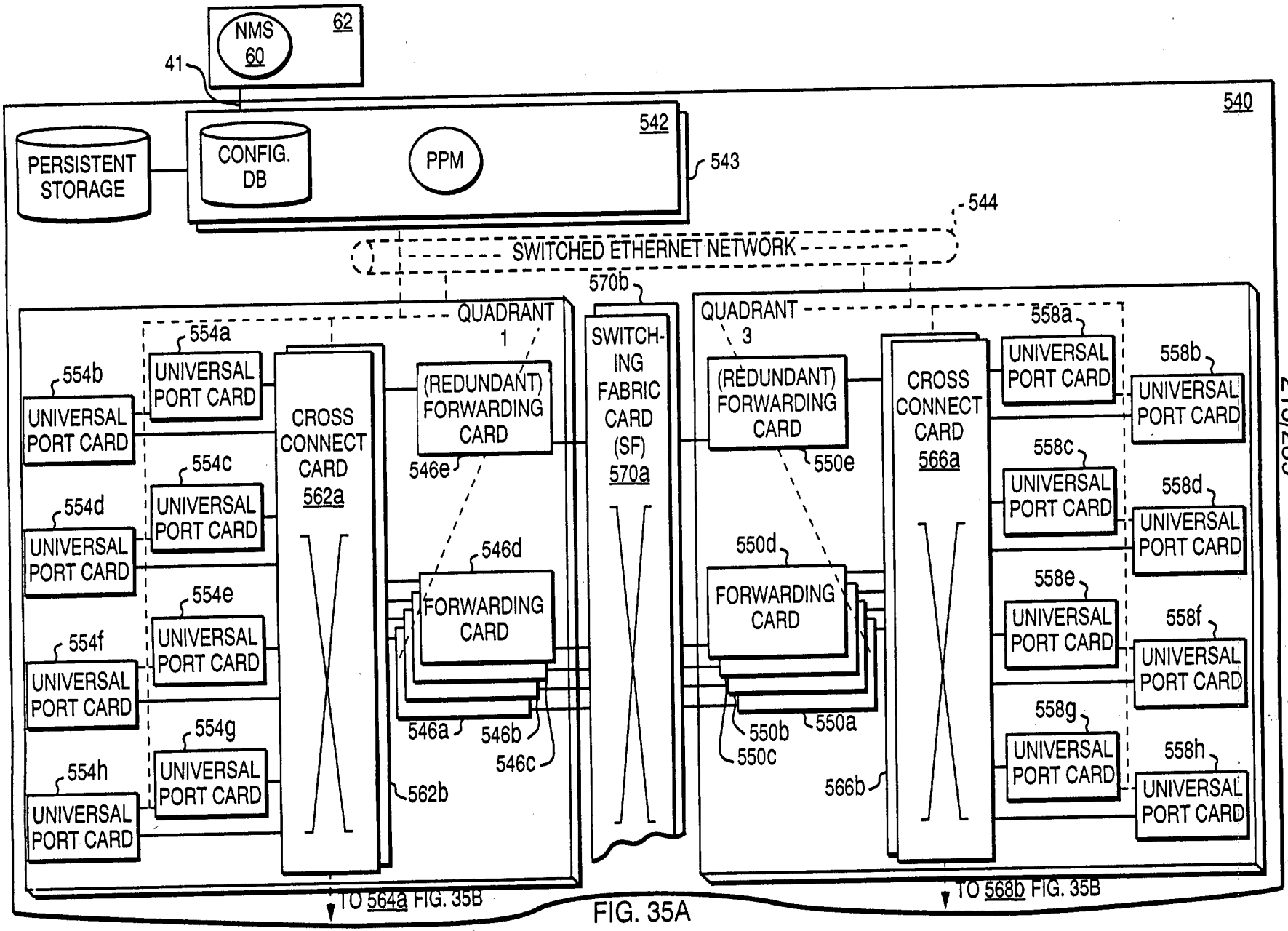

NMS
60
62
41
540
542
PERSISTENT STORAGE
CONFIG. DB
PPM
543
544
SWITCHED ETHERNET NETWORK
570b
QUADRANT 1
QUADRANT 3
SWITCH-ING FABRIC CARD (SF) 570a
554a
554b
554c
554d
554e
554f
554g
554h
UNIVERSAL PORT CARD
CROSS CONNECT CARD 562a
562b
(REDUNDANT) FORWARDING CARD
546e
546d
FORWARDING CARD
546a
546b
546c
550d
550e
550b
550c
550a
566b
CROSS CONNECT CARD 566a
558a
558b
558c
558d
558e
558f
558g
558h
TO 564a FIG. 35B
TO 568b FIG. 35B

FIG. 35A

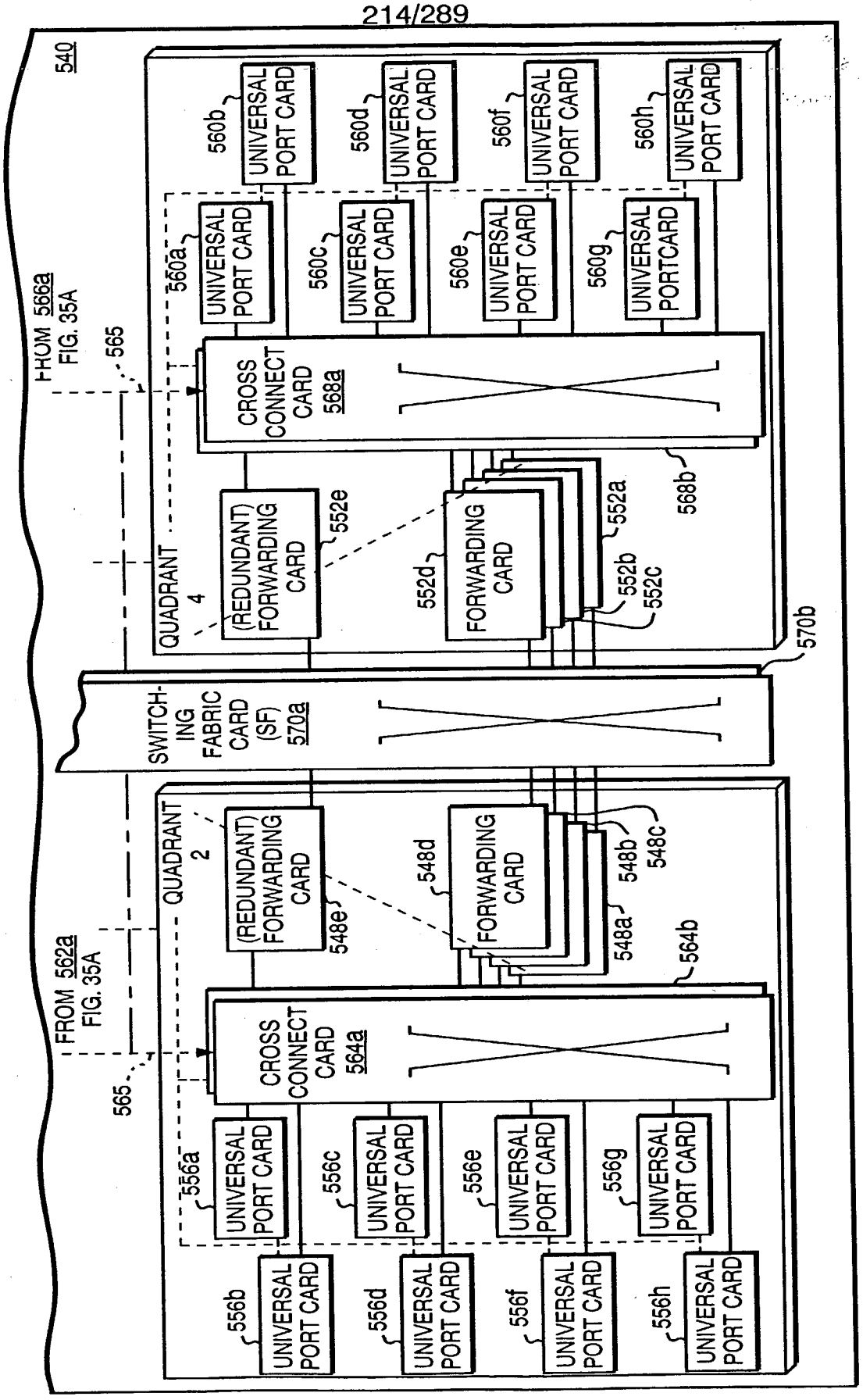

540
FROM 566a FIG. 35A
565
QUADRANT 4
560a
560b
560c
560d
560e
560f
560g
560h
UNIVERSAL PORT CARD
CROSS CONNECT CARD 568a
(REDUNDANT) FORWARDING CARD
552e
552d
FORWARDING CARD
552a
552b
552c
568b
570b
SWITCH-ING FABRIC CARD (SF) 570a
FROM 562a FIG. 35A
565
QUADRANT 2
556a
556b
556c
556d
556e
556f
556g
556h
CROSS CONNECT CARD 564a
548e
548d
548b
548c
548a
564b

FIG. 35B

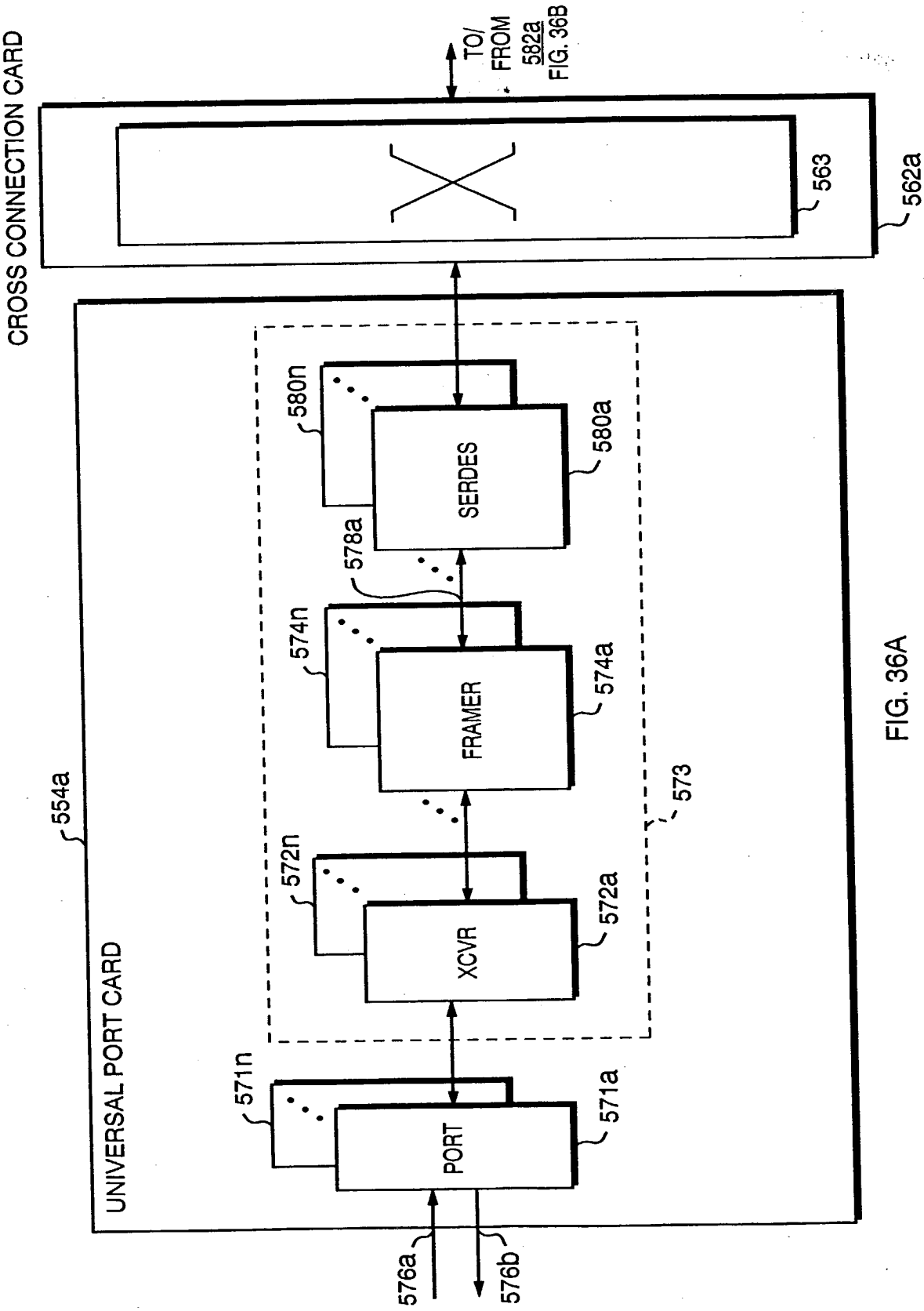

CROSS CONNECTION CARD
TO/
FROM
582a
FIG. 36B
563
562a
580n
580a
SERDES
578a
574n
574a
FRAMER
573
572n
572a
XCVR
571n
571a
PORT
554a
UNIVERSAL PORT CARD
576a
576b

FIG. 36A

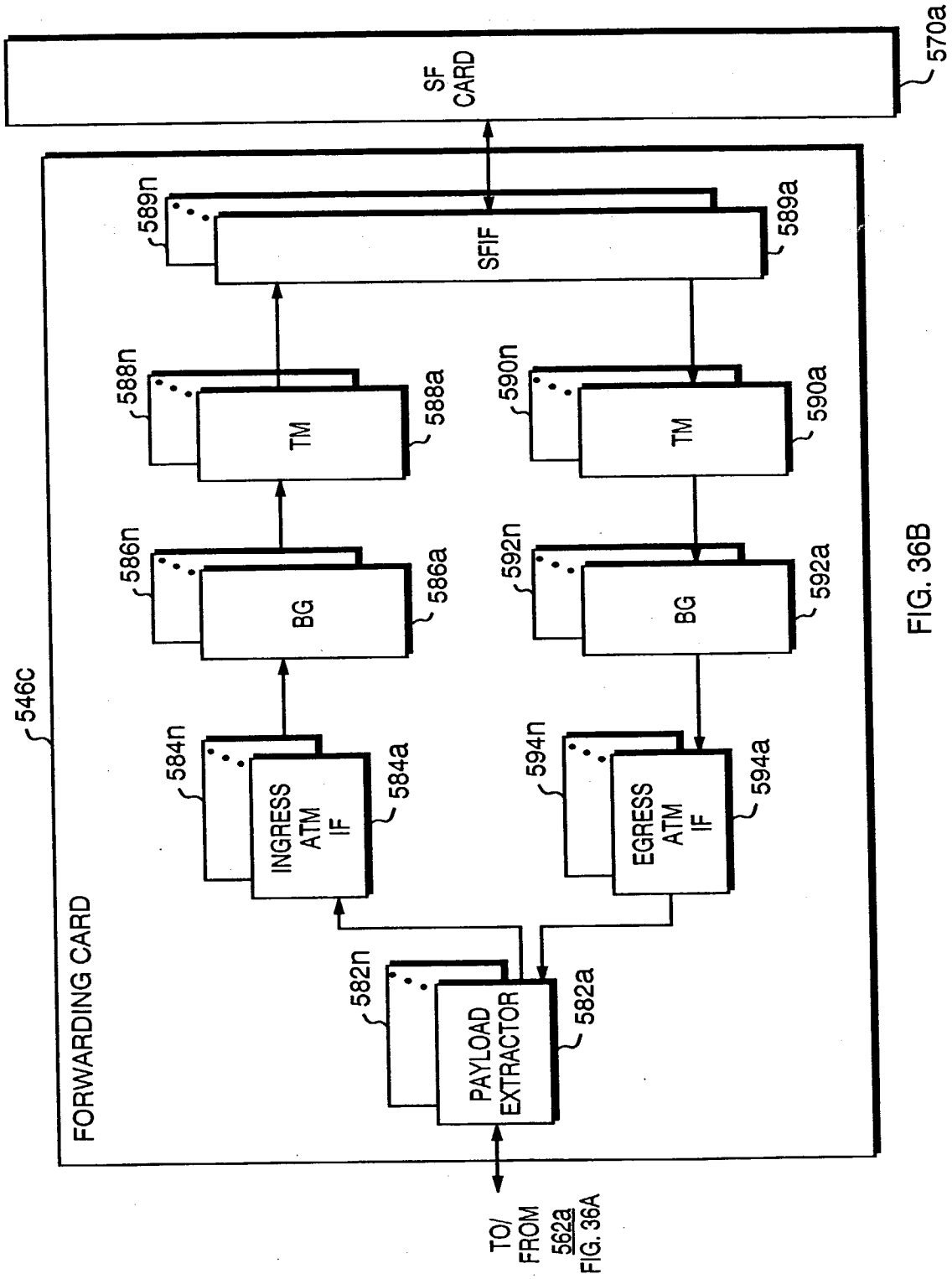

SF CARD
570a
SFIF
589n
589a
TM
588n
588a
TM
590n
590a
BG
586n
586a
BG
592n
592a
INGRESS ATM IF
584n
584a
EGRESS ATM IF
594n
594a
PAYLOAD EXTRACTOR
582n
582a
546c
FORWARDING CARD
TO/ FROM 562a FIG. 36A

FIG. 36B

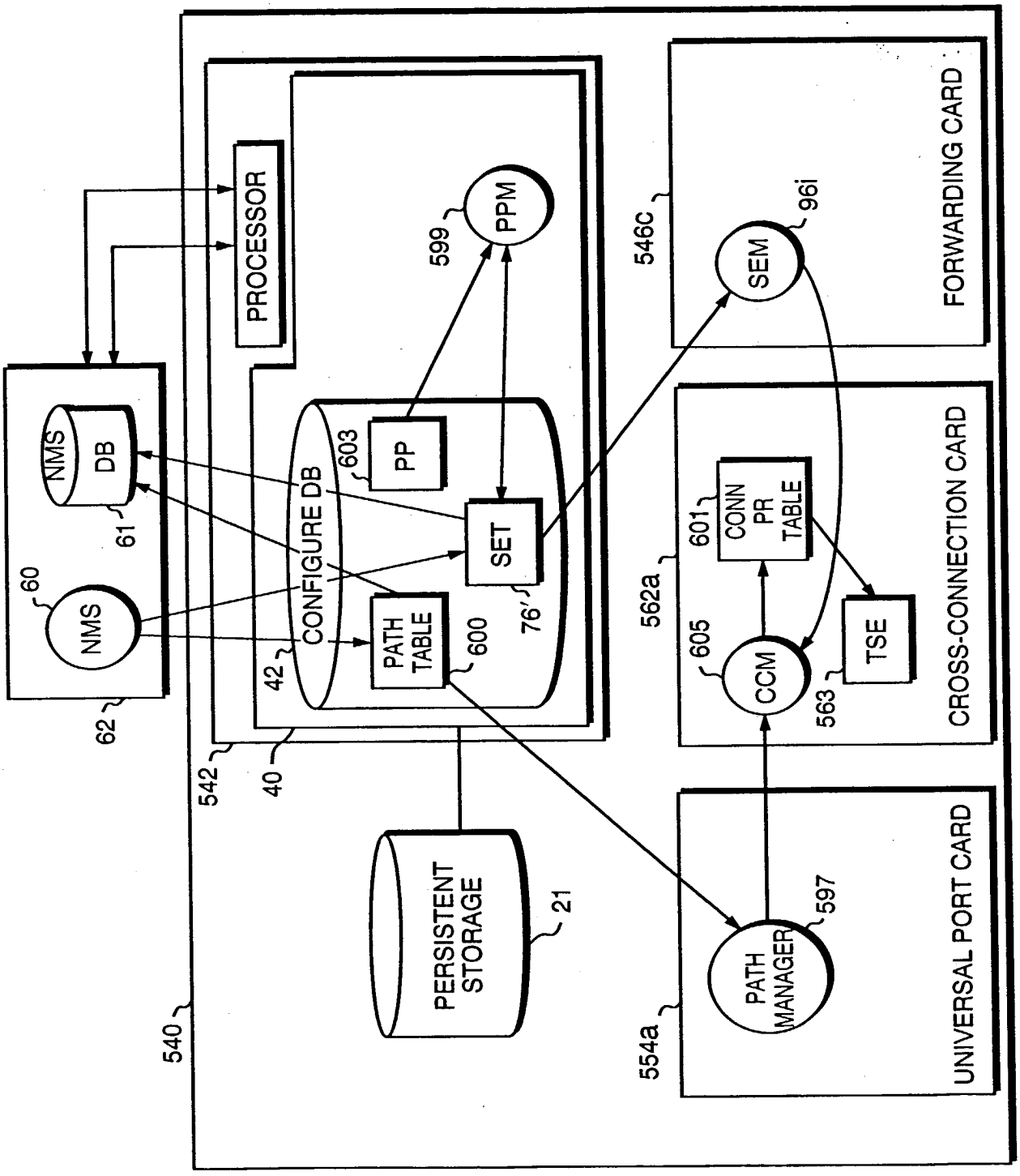

540
NMS
DB
61
60
NMS
62
PROCESSOR
542
40
CONFIGURE DB
42
603
PP
599
PPM
SET
76'
PATH TABLE
600
PERSISTENT STORAGE
21
546c
SEM
96i
FORWARDING CARD
562a
601
CONN PR TABLE
605
CCM
563
TSE
CROSS-CONNECTION CARD
554a
PATH MANAGER
597
UNIVERSAL PORT CARD

FIG. 37

PATH TABLE 600

602

PATH LID	UP PORT LID	TIME SLOT	# OF TIME SLOTS	...
1666	1231	4	3	
⋮	⋮	⋮	⋮	⋮

FIG. 38

SERVICE END POINT TABLE 76'

	SE #	Q #	FC LID (606)	FC SLICE (608)	FC TIME SLOT (610)	PATH PID	...
604	878	1				1666	
	•	•	•	•	•	•	•
	•	•	•	•	•	•	•
	•	•	•	•	•	•	•

FIG. 39

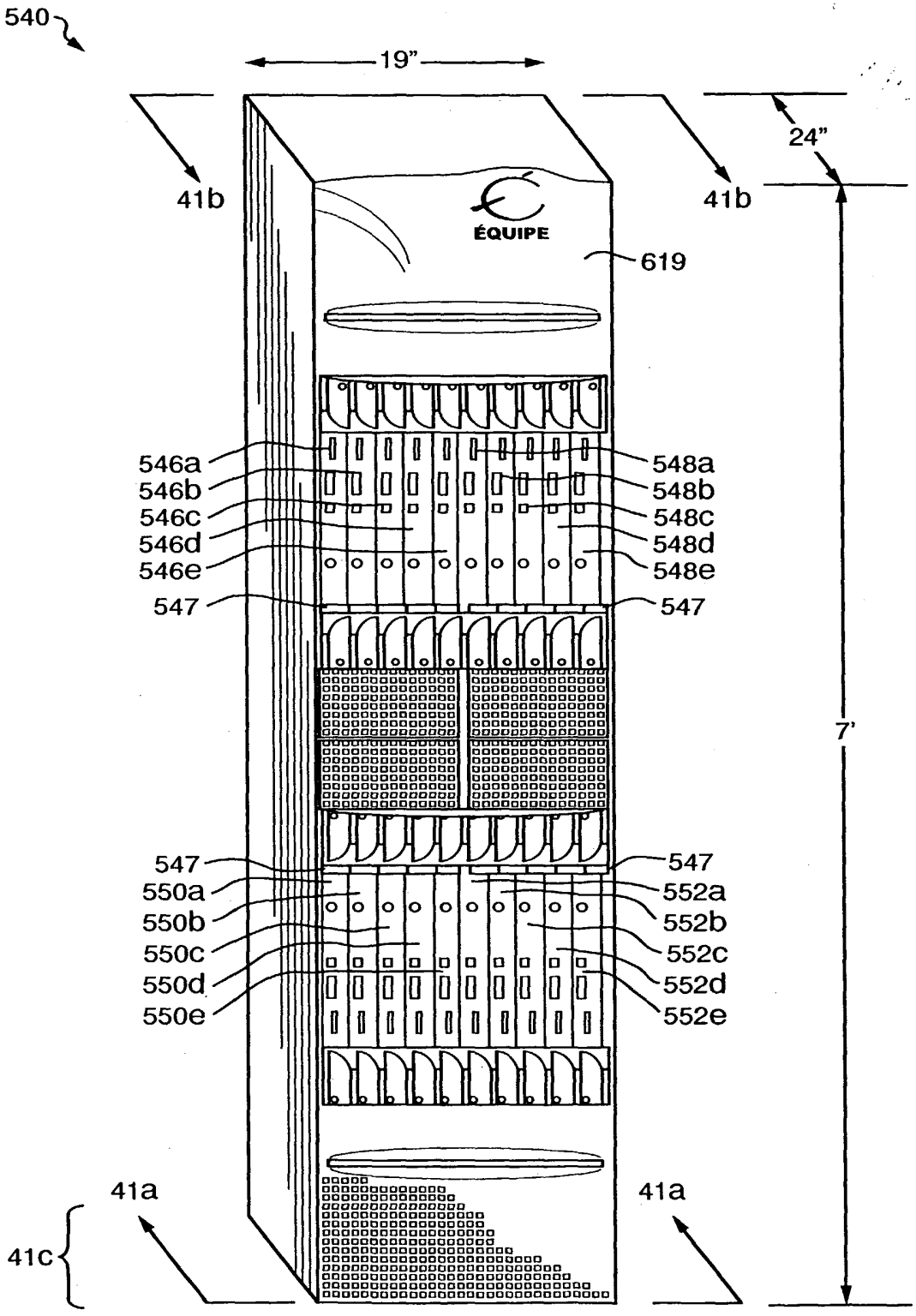

540
19"
24"
41b
41b
ÉQUIPE
619
546a
546b
546c
546d
546e
548a
548b
548c
548d
548e
547
547
547
547
7'
550a
550b
550c
550d
550e
552a
552b
552c
552d
552e
41a
41a
41c

FIG. 40

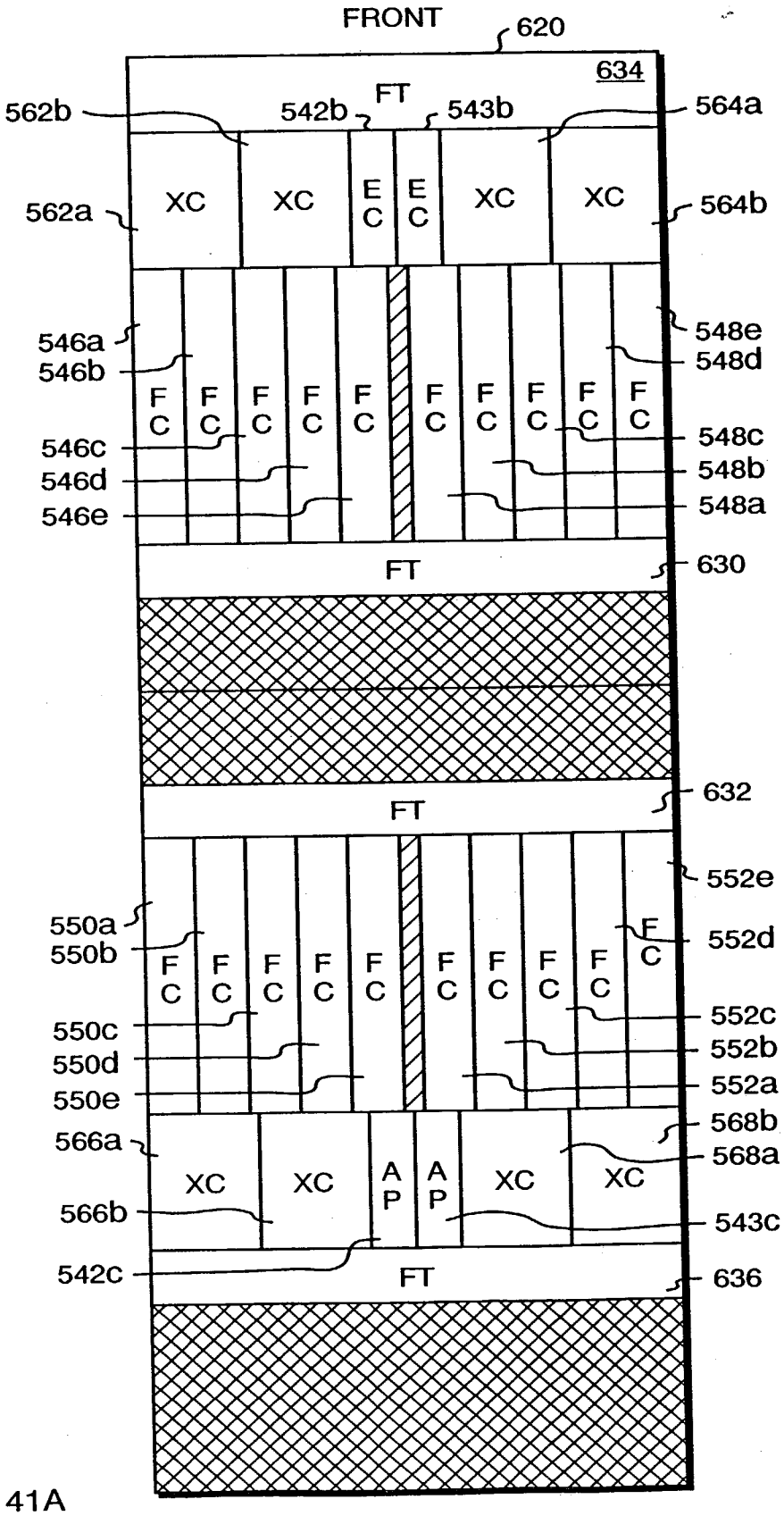

FRONT
620
634
FT
562b
542b
543b
564a
562a
XC
XC
EC
EC
XC
XC
564b
548e
546a
548d
546b
FC
546c
548c
546d
548b
546e
548a
FT
630
632
552e
550a
552d
550b
550c
552c
550d
552b
550e
552a
568b
566a
568a
AP
566b
543c
542c
636

FIG. 41A

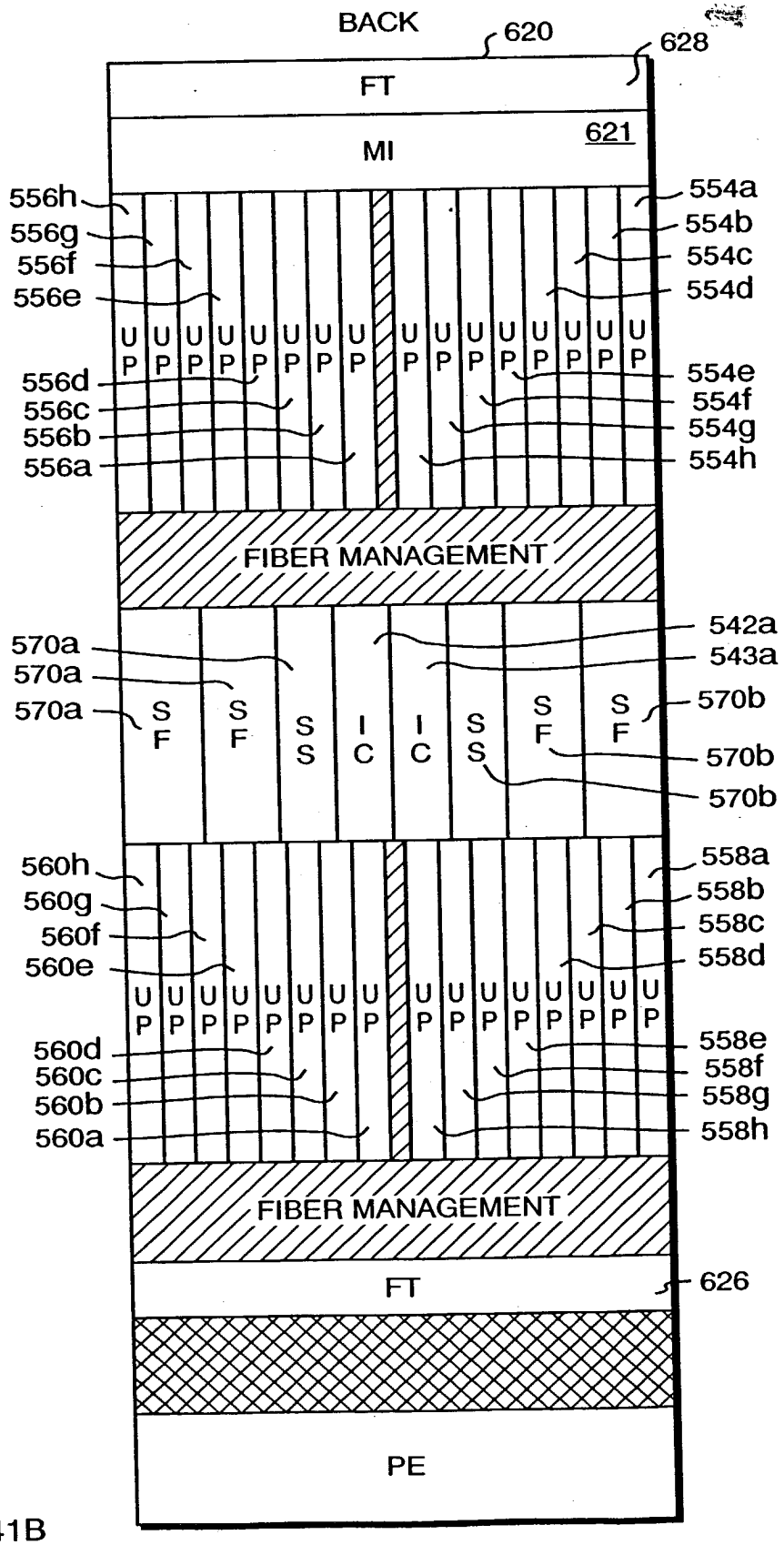

BACK
620
628
FT
621
MI
556h
556g
556f
556e
554a
554b
554c
554d
UP
556d
556c
556b
556a
554e
554f
554g
554h
FIBER MANAGEMENT
570a
570a
570a
542a
543a
SF
SS
IC
570b
570b
570b
560h
560g
560f
560e
558a
558b
558c
558d
560d
560c
560b
560a
558e
558f
558g
558h
FIBER MANAGEMENT
FT
626
PE

FIG. 41B

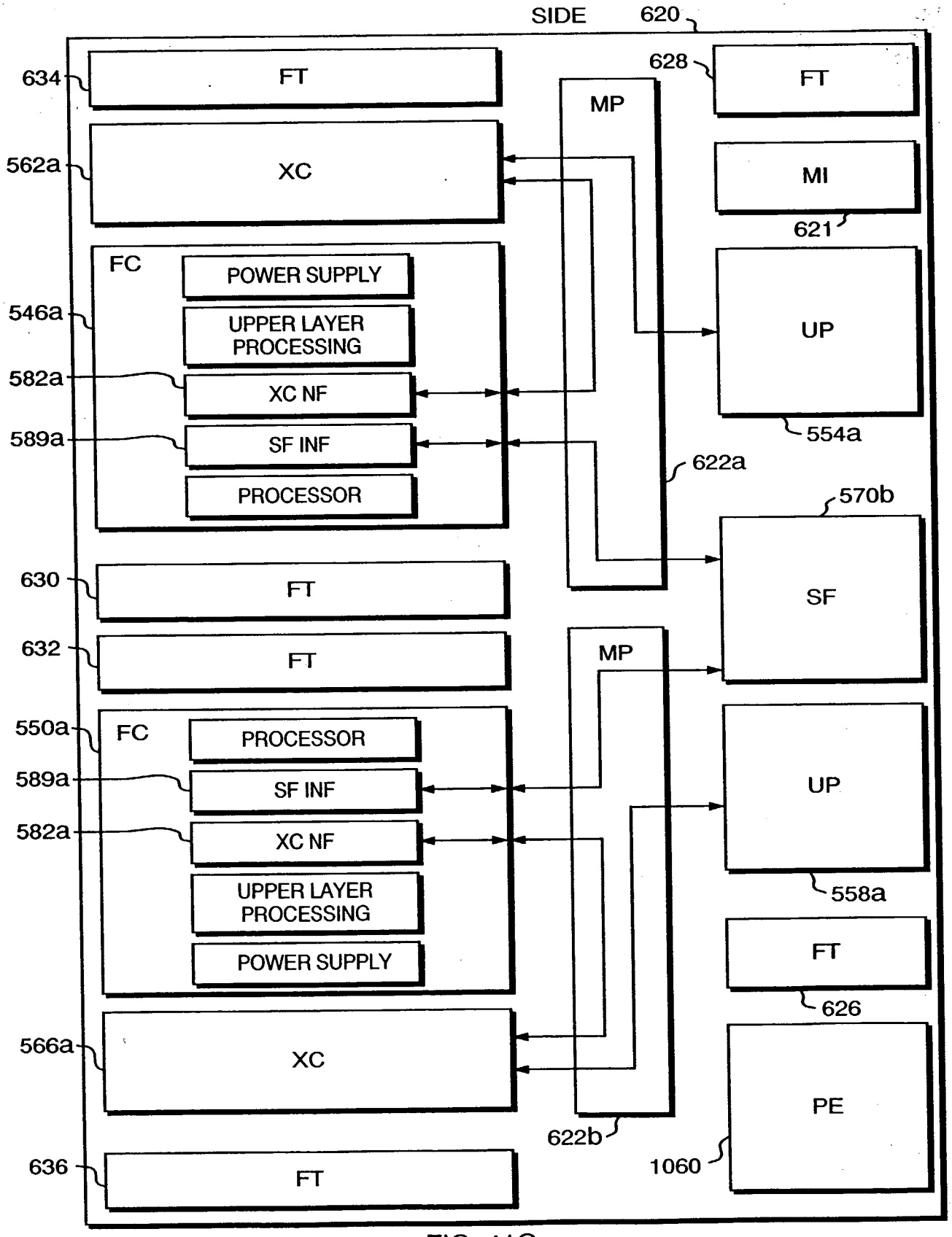

SIDE
620
634
FT
628
FT
MP
562a
XC
MI
621
FC
POWER SUPPLY
546a
UPPER LAYER PROCESSING
UP
582a
XC NF
589a
SF INF
554a
PROCESSOR
622a
570b
630
FT
SF
632
FT
MP
550a
FC
PROCESSOR
589a
SF INF
UP
582a
XC NF
558a
UPPER LAYER PROCESSING
FT
POWER SUPPLY
626
566a
XC
PE
622b
1060
636
FT

FIG. 41C

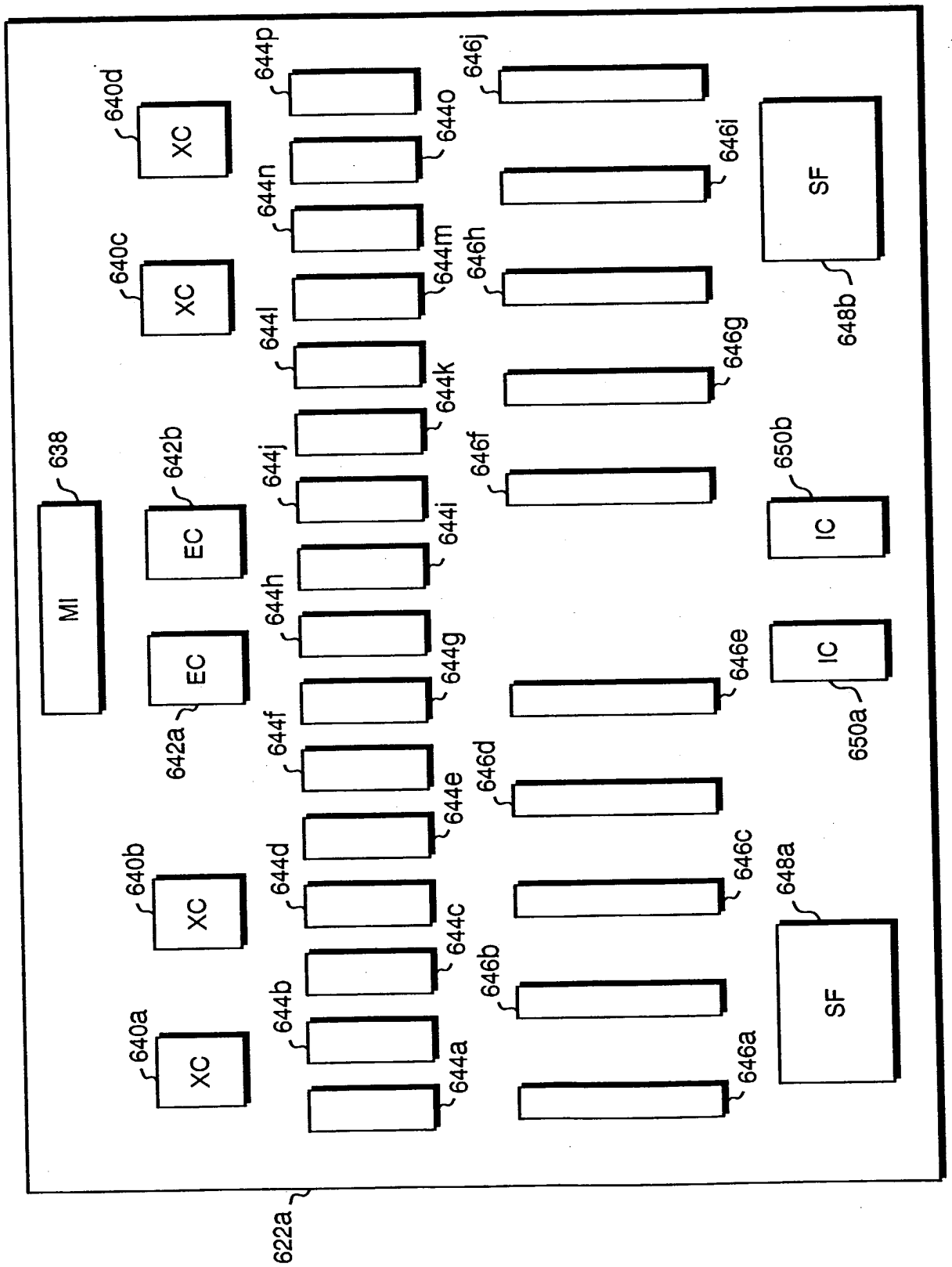

622a
MI
638
EC
642a
EC
642b
XC
640a
XC
640b
XC
640c
XC
640d
644a
644b
644c
644d
644e
644f
644g
644h
644i
644j
644k
644l
644m
644n
644o
644p
646a
646b
646c
646d
646e
646f
646g
646h
646i
646j
SF
648a
SF
648b
IC
650a
IC
650b

FIG. 42A

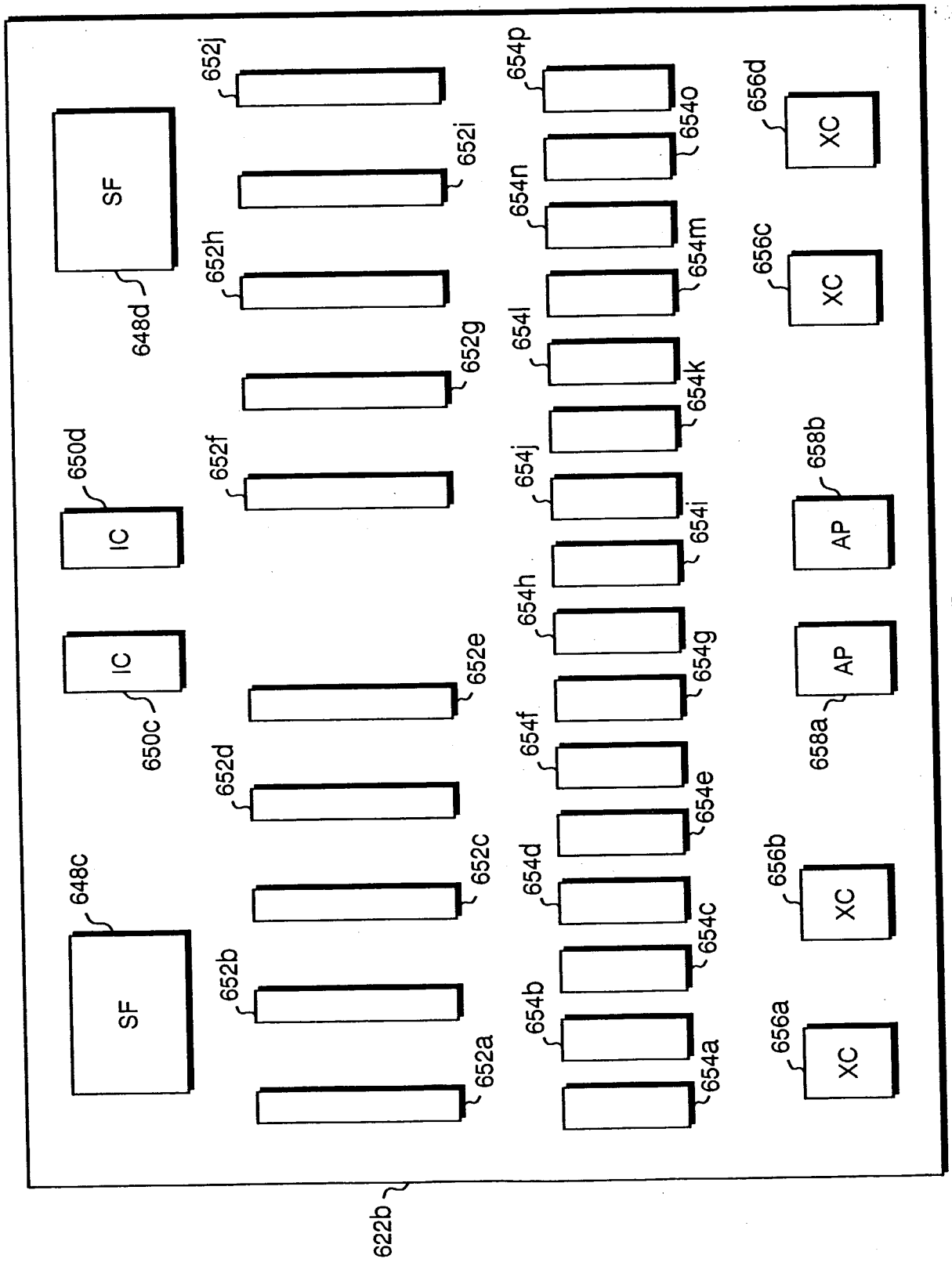

622b
SF
648d
IC
650d
IC
650c
SF
648c
652j
652i
652h
652g
652f
652e
652d
652c
652b
652a
654p
654o
654n
654m
654l
654k
654j
654i
654h
654g
654f
654e
654d
654c
654b
654a
656d
XC
656c
XC
AP
658b
AP
658a
656b
XC
656a
XC

FIG. 42B

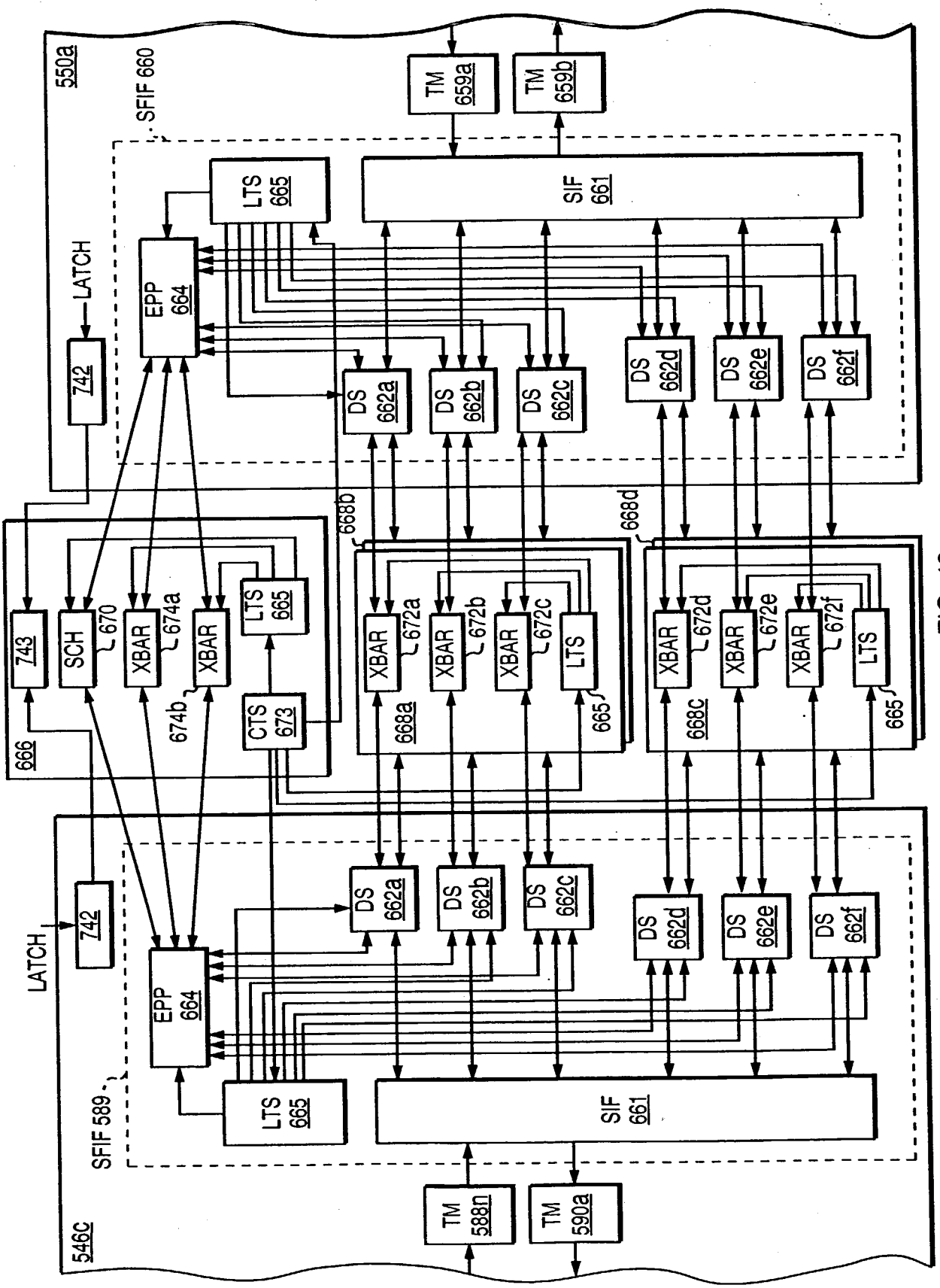

550a
SFIF 660
TM 659a
TM 659b
LTS 665
SIF 661
LATCH
EPP 664
742
DS 662a
DS 662b
DS 662c
DS 662d
DS 662e
DS 662f
668b
668d
743
SCH 670
XBAR 674a
XBAR
LTS 665
CTS 673
674b
666
XBAR 672a
XBAR 672b
XBAR 672c
LTS 665
668a
XBAR 672d
XBAR 672e
XBAR 672f
LTS 665
668c
LATCH
742
EPP 664
DS 662a
DS 662b
DS 662c
DS 662d
DS 662e
DS 662f
SFIF 589
LTS 665
SIF 661
TM 588n
TM 590a
546C

FIG. 43

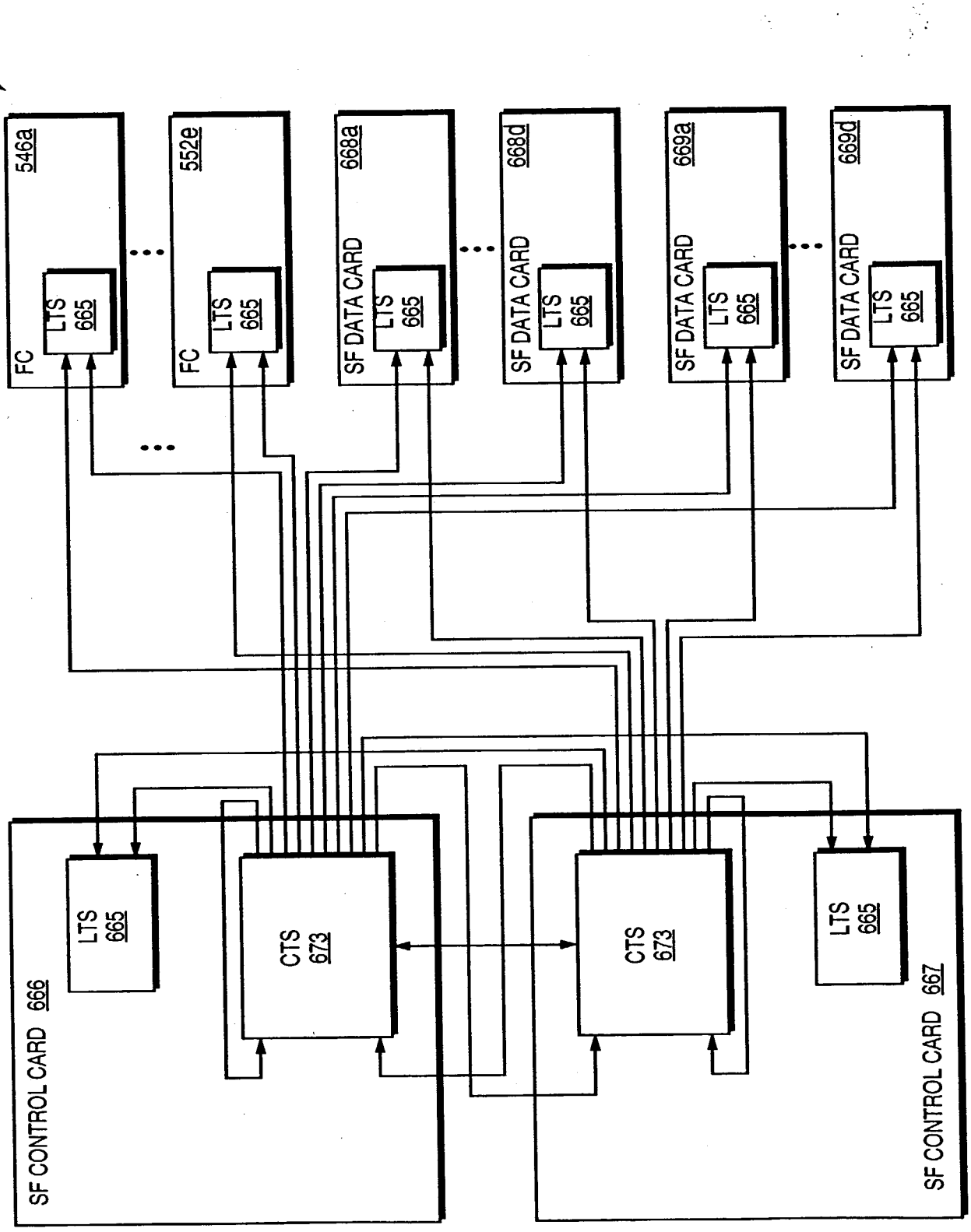

640
FC
546a
LTS 665
FC
552e
LTS 665
SF DATA CARD
668a
LTS 665
SF DATA CARD
668d
LTS 665
SF DATA CARD
669a
LTS 665
SF DATA CARD
669d
LTS 665
SF CONTROL CARD 666
LTS 665
CTS 673
CTS 673
LTS 665
SF CONTROL CARD 667

FIG. 44

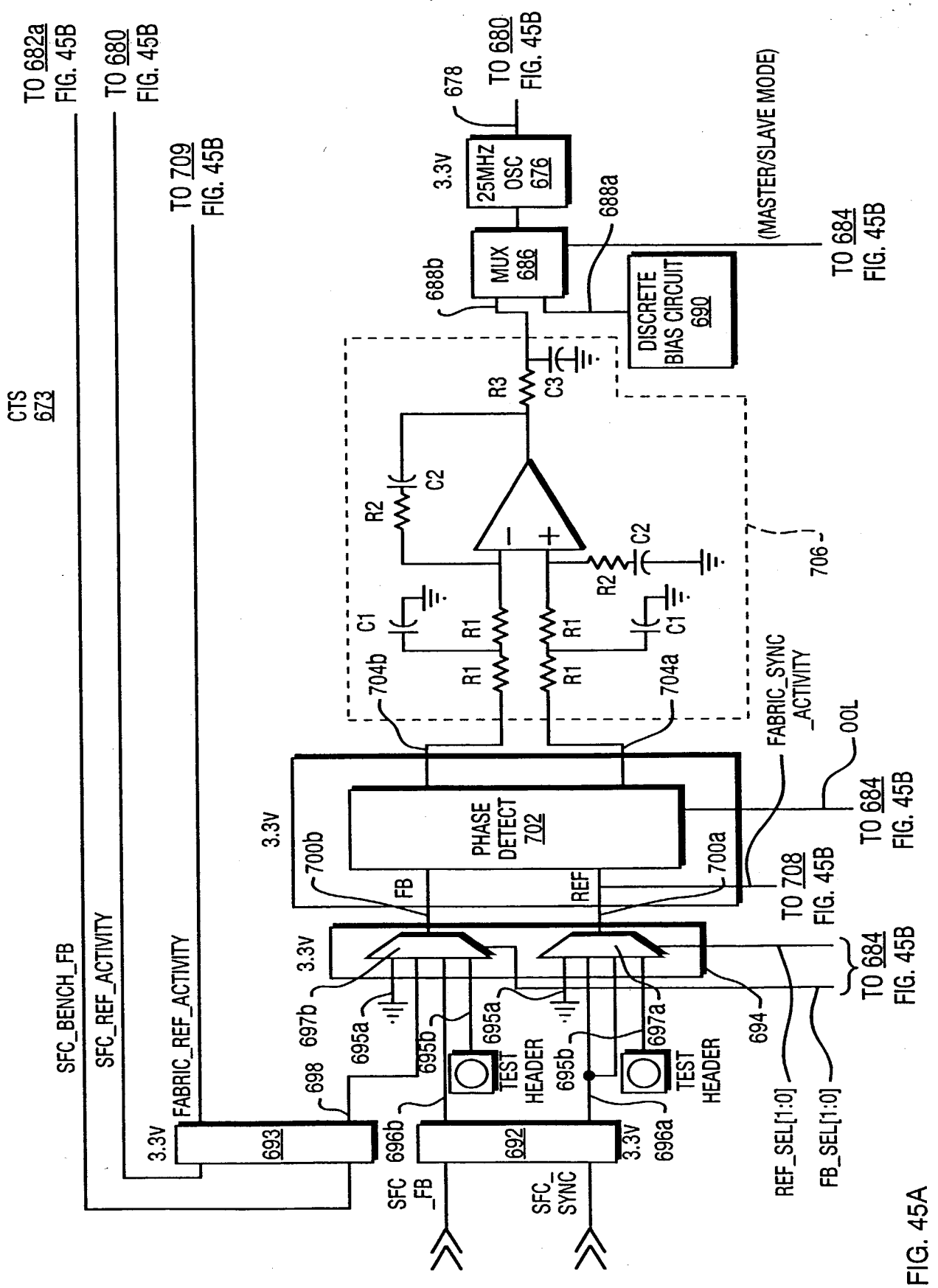

TO 682a FIG. 45B
TO 680 FIG. 45B
TO 709 FIG. 45B
CTS 673
SFC_BENCH_FB
SFC_REF_ACTIVITY
FABRIC_REF_ACTIVITY
3.3V
693
692
SFC _FB
SFC_ SYNC
696b
696a
698
697b
697a
695a
695b
TEST HEADER
694
REF_SEL[1:0]
FB_SEL[1:0]
TO 684 FIG. 45B
TO 708 FIG. 45B
PHASE DETECT 702
FB
REF
700b
700a
704b
704a
FABRIC_SYNC _ACTIVITY
OOL
R1
R2
R3
C1
C2
C3
706
MUX 686
688b
688a
DISCRETE BIAS CIRCUIT 690
(MASTER/SLAVE MODE)
25MHZ OSC 676
678

FIG. 45A

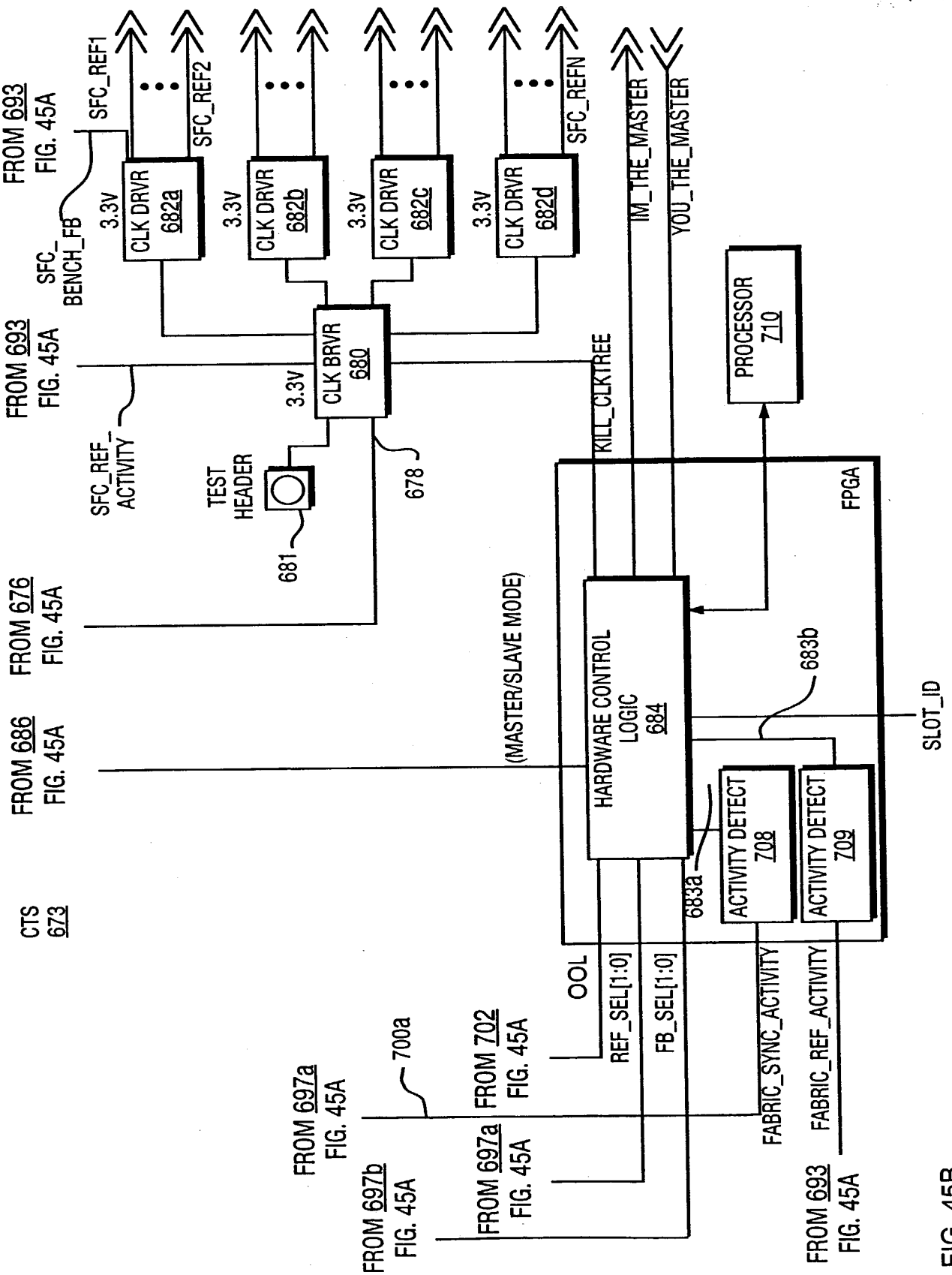

FROM 693 FIG. 45A
SFC_REF1
SFC_REF2
SFC_REFN
SFC_BENCH_FB
3.3V
CLK DRVR 682a
CLK DRVR 682b
CLK DRVR 682c
CLK DRVR 682d
IM_THE_MASTER
YOU_THE_MASTER
FROM 693 FIG. 45A
SFC_REF_ACTIVITY
CLK BRVR 680
KILL_CLKTREE
PROCESSOR 710
TEST HEADER
681
678
FROM 676 FIG. 45A
FROM 686 FIG. 45A
(MASTER/SLAVE MODE)
HARDWARE CONTROL LOGIC 684
FPGA
683b
SLOT_ID
CTS 673
ACTIVITY DETECT 708
ACTIVITY DETECT 709
683a
OOL
REF_SEL[1:0]
FB_SEL[1:0]
FABRIC_SYNC_ACTIVITY
FABRIC_REF_ACTIVITY
FROM 697a FIG. 45A
700a
FROM 702 FIG. 45A
FROM 697a FIG. 45A
FROM 697b FIG. 45A
FROM 693 FIG. 45A

FIG. 45B

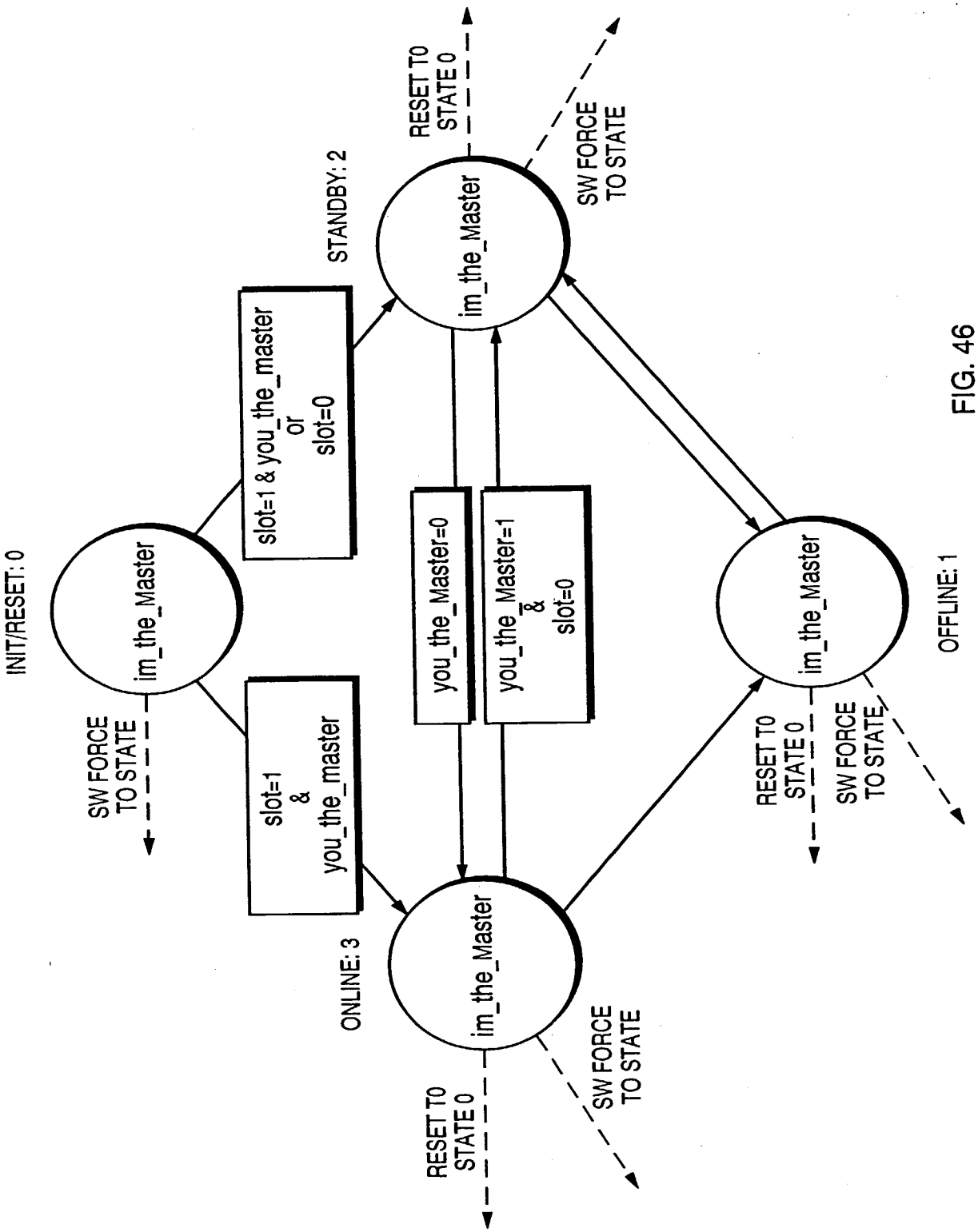

INIT/RESET: 0
im_the_Master
SW FORCE TO STATE
slot=1 & you_the_master or slot=0
STANDBY: 2
im_the_Master
RESET TO STATE 0
SW FORCE TO STATE
slot=1 & you_the_master
you_the_Master=0
you_the_Master=1 & slot=0
ONLINE: 3
im_the_Master
RESET TO STATE 0
SW FORCE TO STATE
im_the_Master
RESET TO STATE 0
SW FORCE TO STATE
OFFLINE: 1

FIG. 46

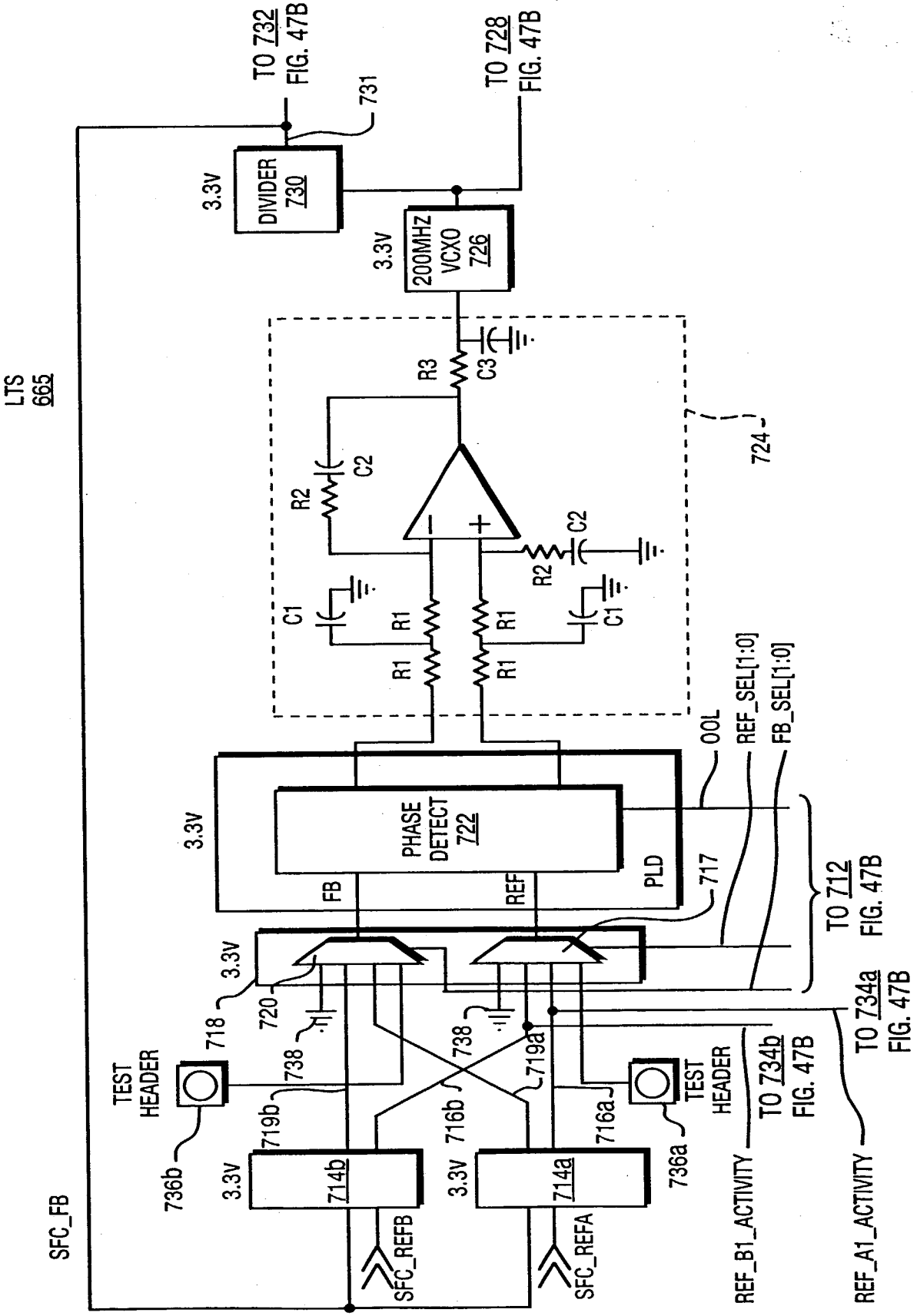

LTS
665
SFC_FB
TO 732
FIG. 47B
731
TO 728
FIG. 47B
3.3V
DIVIDER
730
3.3V
200MHZ
VCXO
726
R3
C3
724
C2
R2
C1
R1
PHASE
DETECT
722
FB
REF
PLD
717
OOL
REF_SEL[1:0]
FB_SEL[1:0]
TO 712
FIG. 47B
TO 734a
FIG. 47B
TO 734b
FIG. 47B
718
720
738
719a
719b
716a
716b
TEST
HEADER
736b
736a
714b
714a
SFC_REFB
SFC_REFA
REF_B1_ACTIVITY
REF_A1_ACTIVITY

FIG. 47A

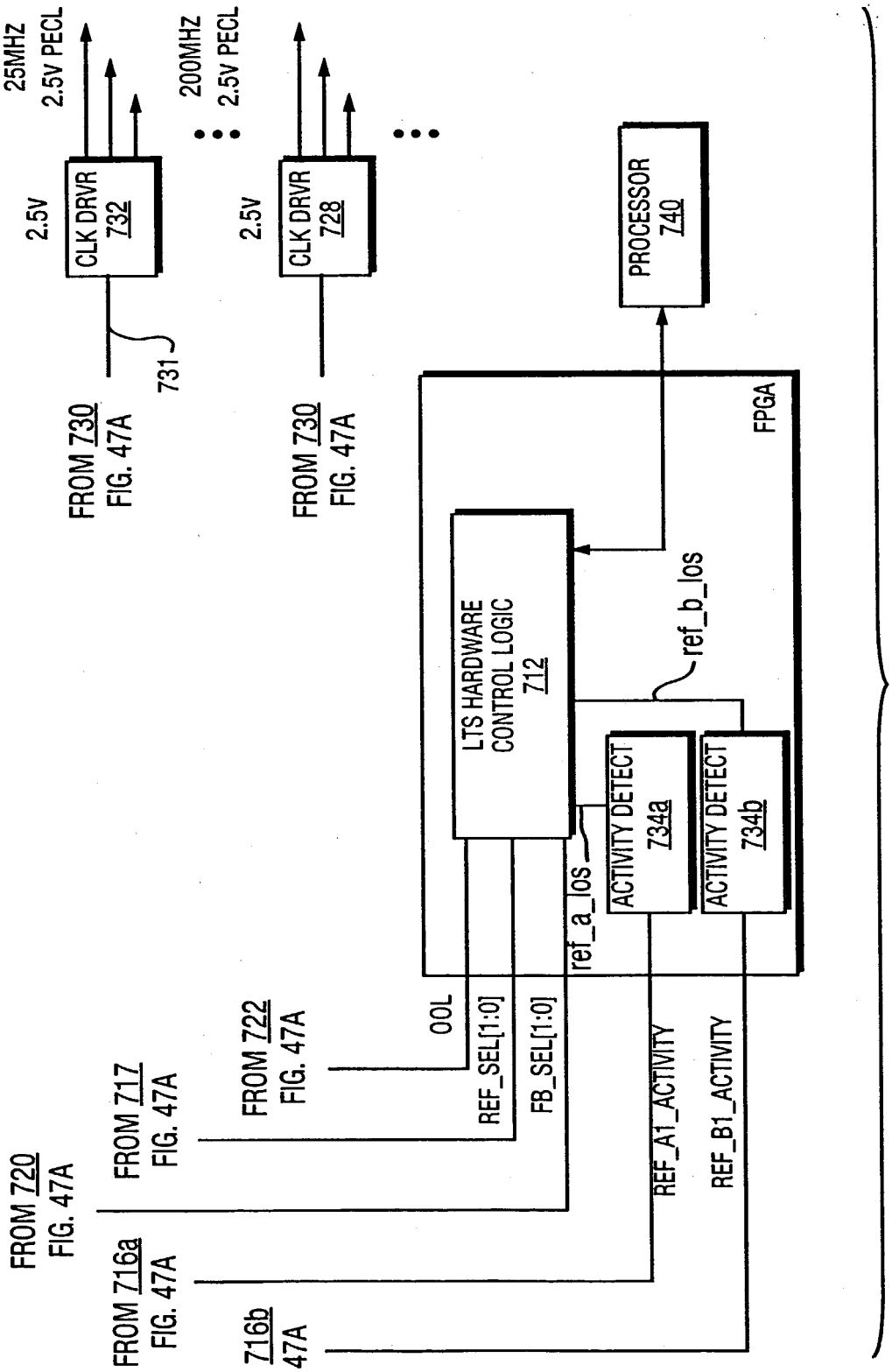

25MHZ
2.5V PECL
200MHZ
2.5V PECL
2.5V
CLK DRVR
Z32
2.5V
CLK DRVR
Z28
731
FROM Z30
FIG. 47A
FROM Z30
FIG. 47A
PROCESSOR
Z40
FPGA
LTS HARDWARE
CONTROL LOGIC
Z12
ref_b_los
ACTIVITY DETECT
Z34a
ACTIVITY DETECT
Z34b
ref_a_los
OOL
REF_SEL[1:0]
FB_SEL[1:0]
REF_A1_ACTIVITY
REF_B1_ACTIVITY
FROM Z22
FIG. 47A
FROM Z17
FIG. 47A
FROM Z20
FIG. 47A
FROM Z16a
FIG. 47A
FROM Z16b
FIG. 47A

FIG. 47B

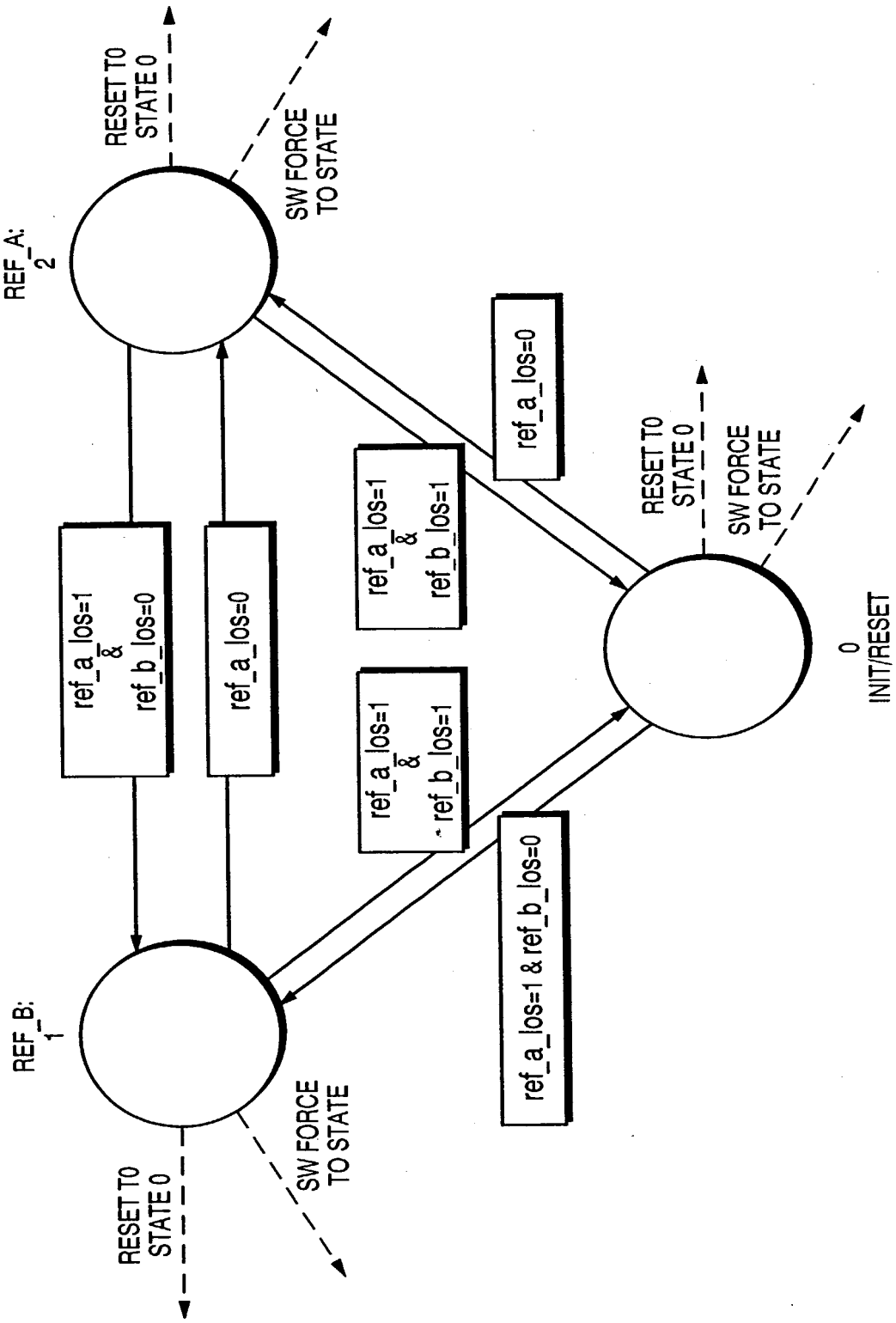

REF_A:
2
RESET TO
STATE 0
SW FORCE
TO STATE
REF_B:
1
RESET TO
STATE 0
SW FORCE
TO STATE
0
INIT/RESET
RESET TO
STATE 0
SW FORCE
TO STATE
ref_a_los=1
&
ref_b_los=0
ref_a_los=0
ref_a_los=1
&
ref_b_los=1
ref_a_los=1
&
ref_b_los=1
ref_a_los=0
ref_a_los=1 & ref_b_los=0

FIG. 48

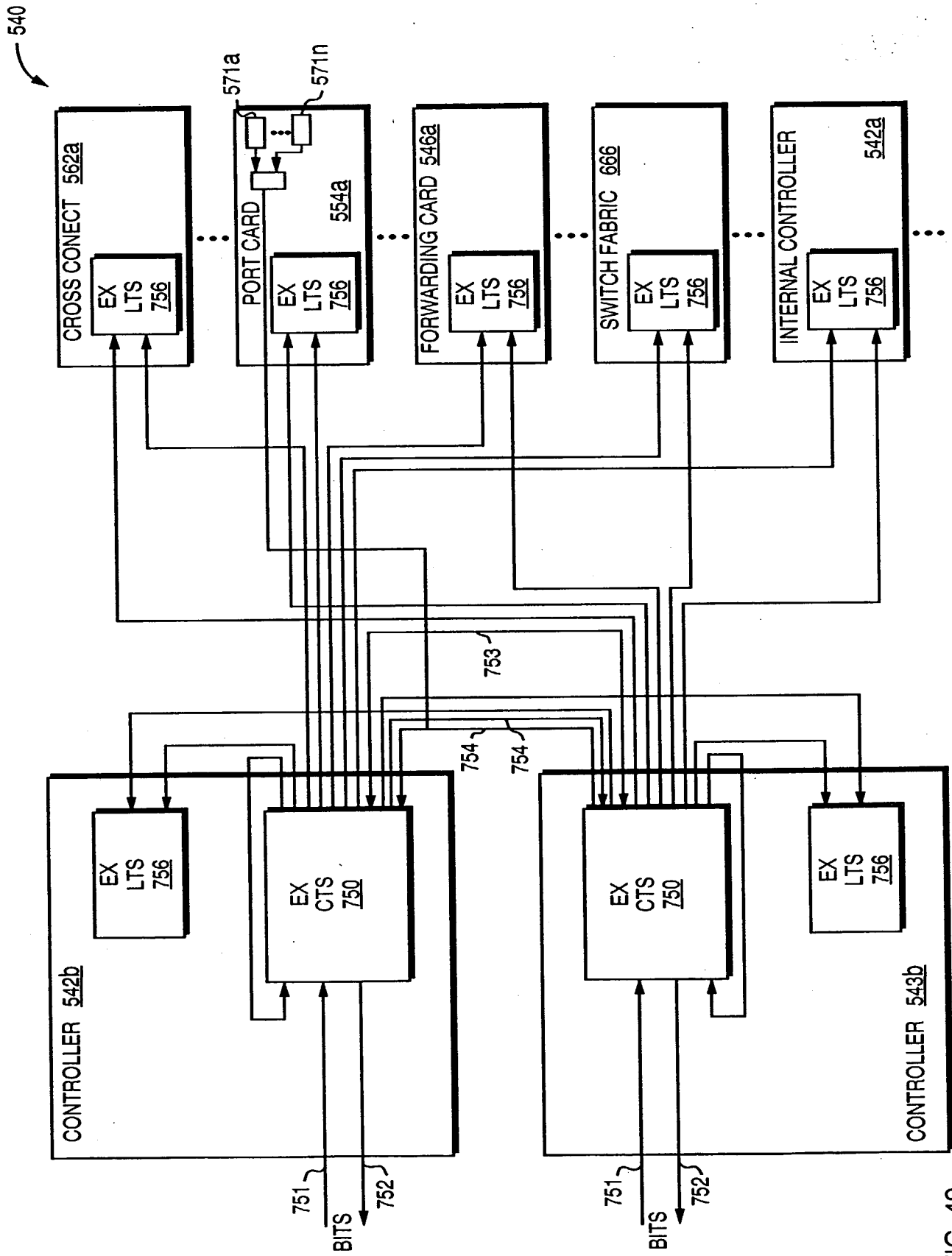

540
571a
571n
CROSS CONECT 562a
EX LTS 756
PORT CARD 554a
EX LTS 756
FORWARDING CARD 546a
EX LTS 756
SWITCH FABRIC 666
EX LTS 756
INTERNAL CONTROLLER 542a
EX LTS 756
753
754
754
CONTROLLER 542b
EX LTS 756
EX CTS 750
751
BITS
752
CONTROLLER 543b
EX CTS 750
EX LTS 756
751
BITS
752

FIG. 49

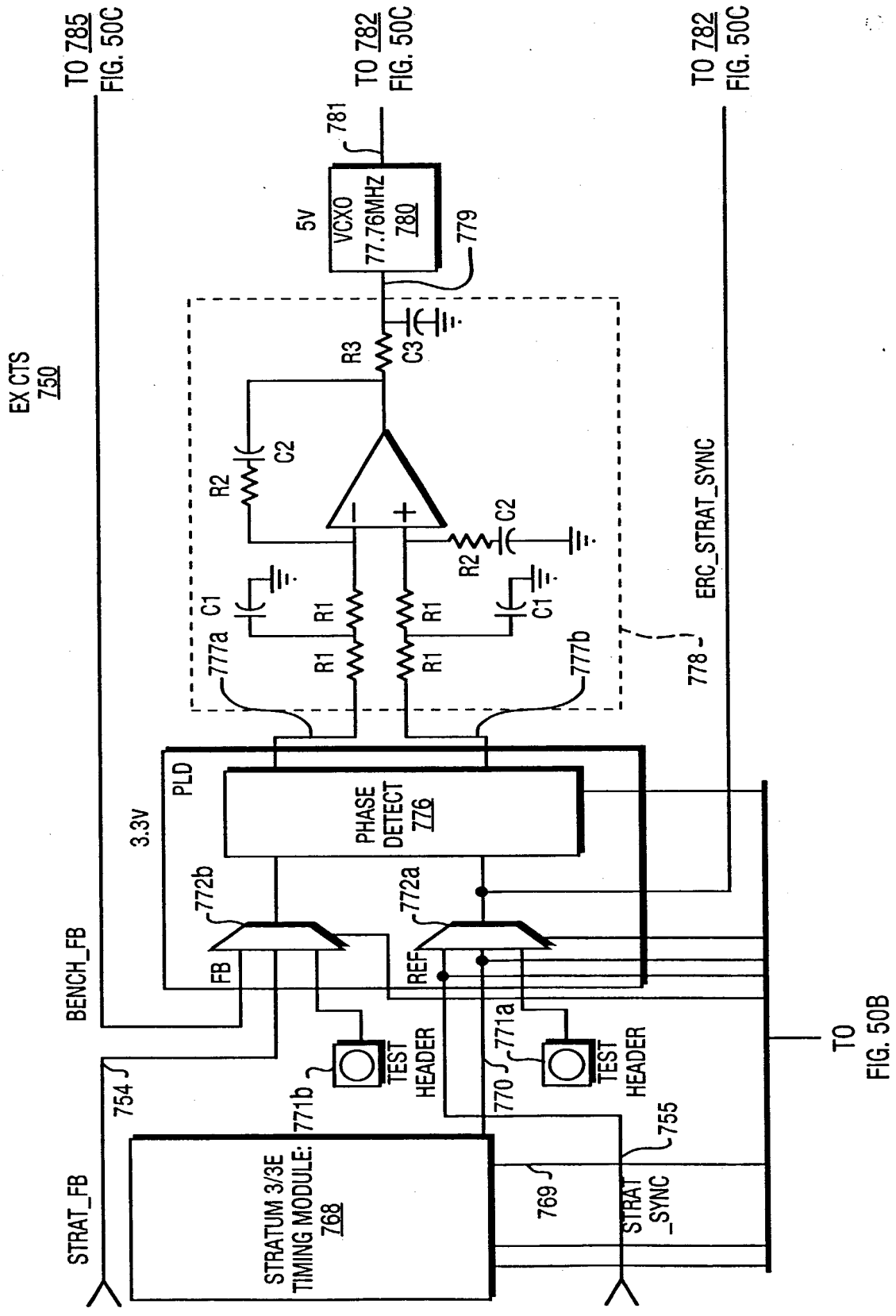

TO 785 FIG. 50C
TO 782 FIG. 50C
TO 782 FIG. 50C
EX CTS 750
781
5V
VCXO 77.76MHz 780
779
C3
R3
C2
R2
C1
R1
777a
777b
778
ERC_STRAT_SYNC
PLD
3.3V
PHASE DETECT 776
772b
772a
FB
REF
BENCH_FB
TEST HEADER
771a
770
771b
754
STRAT_FB
STRATUM 3/3E TIMING MODULE: 768
769
755
STRAT _SYNC
TO FIG. 50B

FIG. 50A

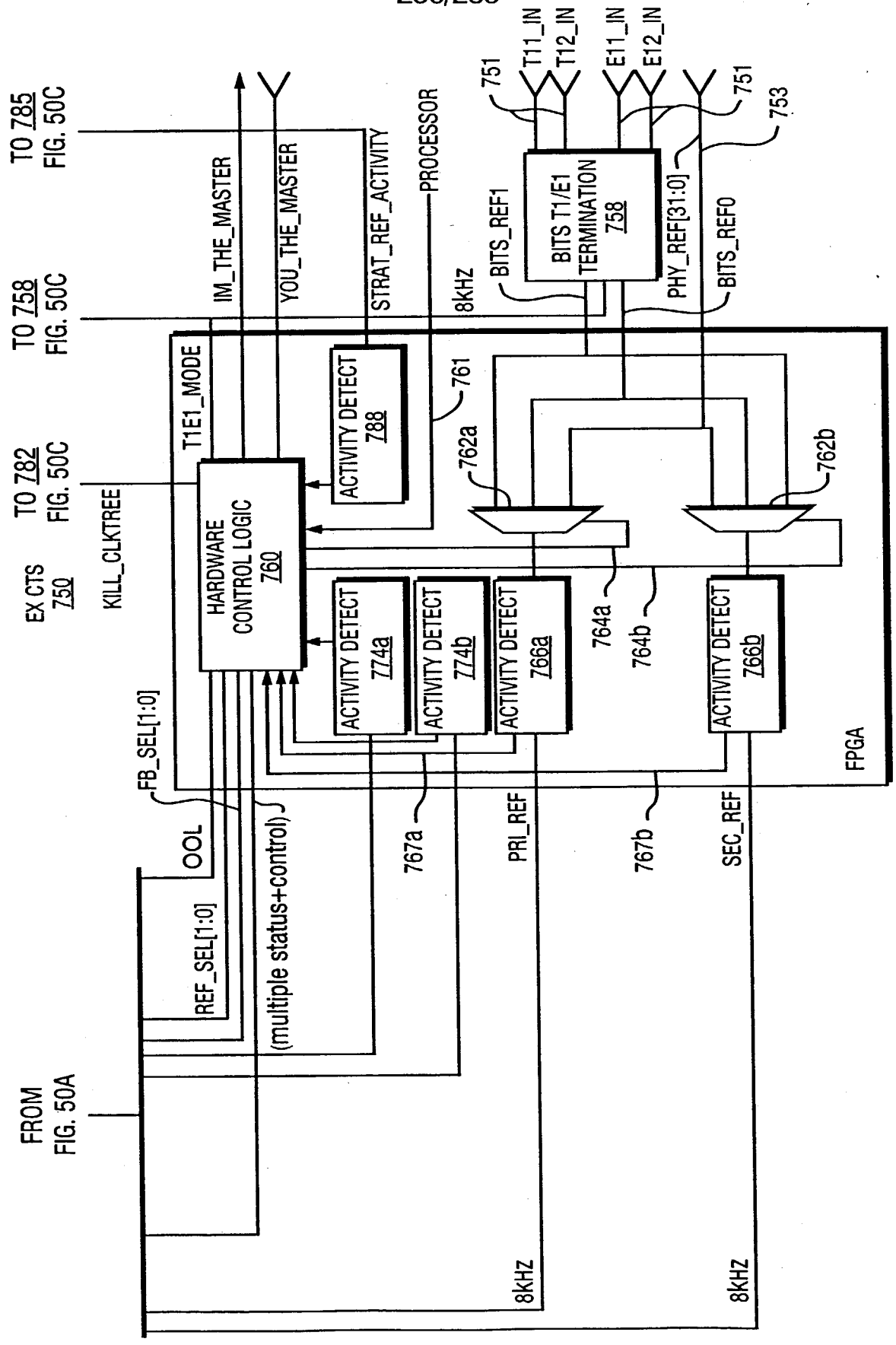

TO 785 FIG. 50C
TO 758 FIG. 50C
TO 782 FIG. 50C
EX CTS 750
KILL_CLKTREE
T1E1_MODE
IM_THE_MASTER
YOU_THE_MASTER
STRAT_REF_ACTIVITY
PROCESSOR
8kHZ
BITS_REF1
BITS_REF0
PHY_REF[31:0]
751
T11_IN
T12_IN
E11_IN
E12_IN
753
BITS T1/E1 TERMINATION 758
ACTIVITY DETECT 788
761
762a
762b
HARDWARE CONTROL LOGIC 760
ACTIVITY DETECT 774a
ACTIVITY DETECT 774b
ACTIVITY DETECT 766a
ACTIVITY DETECT 766b
764a
764b
FB_SEL[1:0]
OOL
REF_SEL[1:0]
(multiple status+control)
767a
767b
PRI_REF
SEC_REF
FPGA
FROM FIG. 50A
8kHZ
8kHZ

FIG. 50B

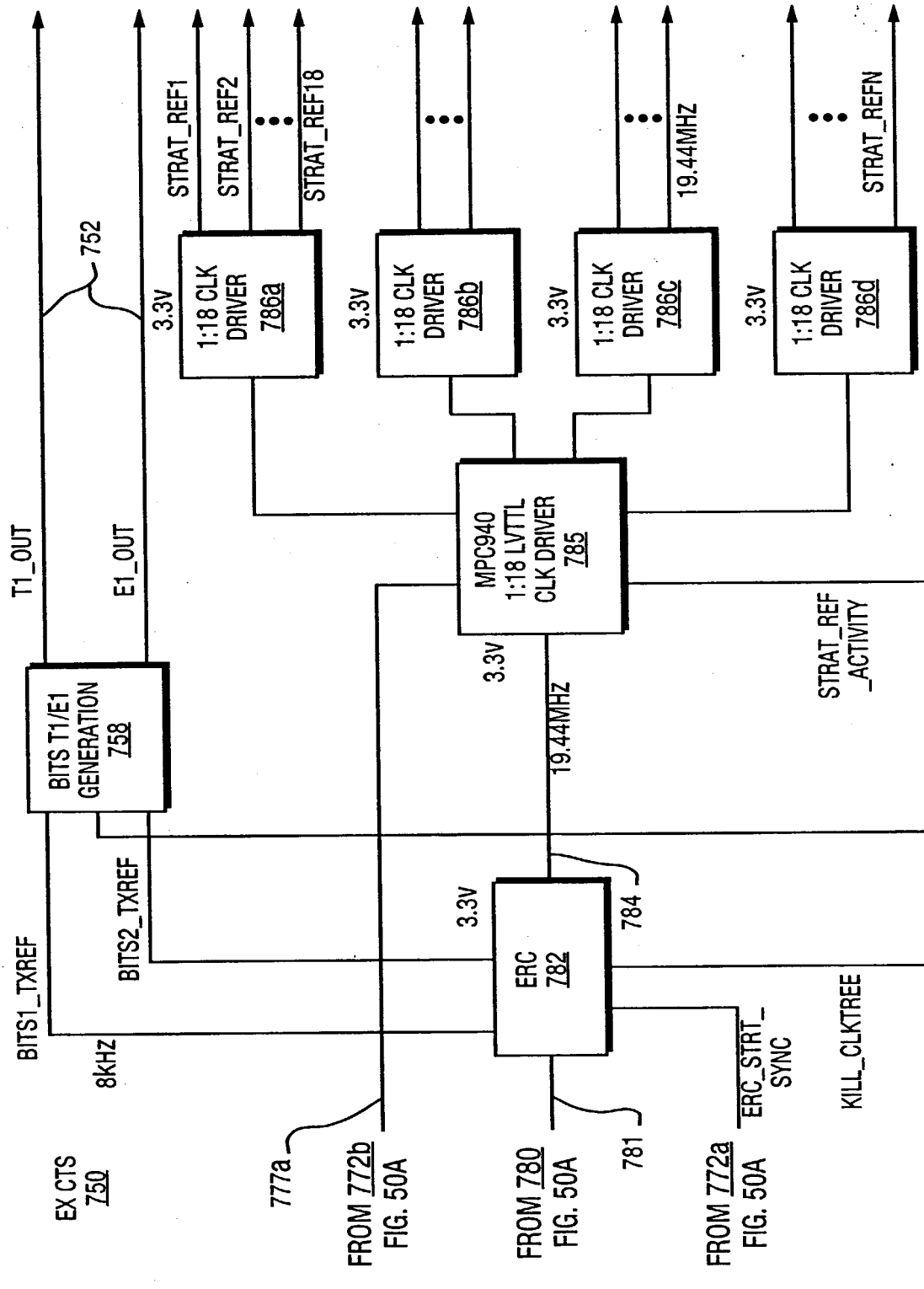

EX CTS
Z50
8kHZ
BITS1_TXREF
BITS2_TXREF
BITS T1/E1
GENERATION
Z58
T1_OUT
E1_OUT
752
777a
FROM Z72b
FIG. 50A
ERC
Z82
3.3V
784
781
FROM Z80
FIG. 50A
ERC_STRT_
SYNC
FROM Z72a
FIG. 50A
KILL_CLKTREE
FROM Z60
FIG. 50B
FROM Z58
FIG. 50B
MPC940
1:18 LVTTL
CLK DRIVER
Z85
19.44MHz
STRAT_REF
_ACTIVITY
FROM Z88
FIG. 50B
1:18 CLK
DRIVER
Z86a
1:18 CLK
DRIVER
Z86b
1:18 CLK
DRIVER
Z86C
1:18 CLK
DRIVER
Z86d
STRAT_REF1
STRAT_REF2
STRAT_REF18
19.44MHz
STRAT_REFN

FIG. 50C

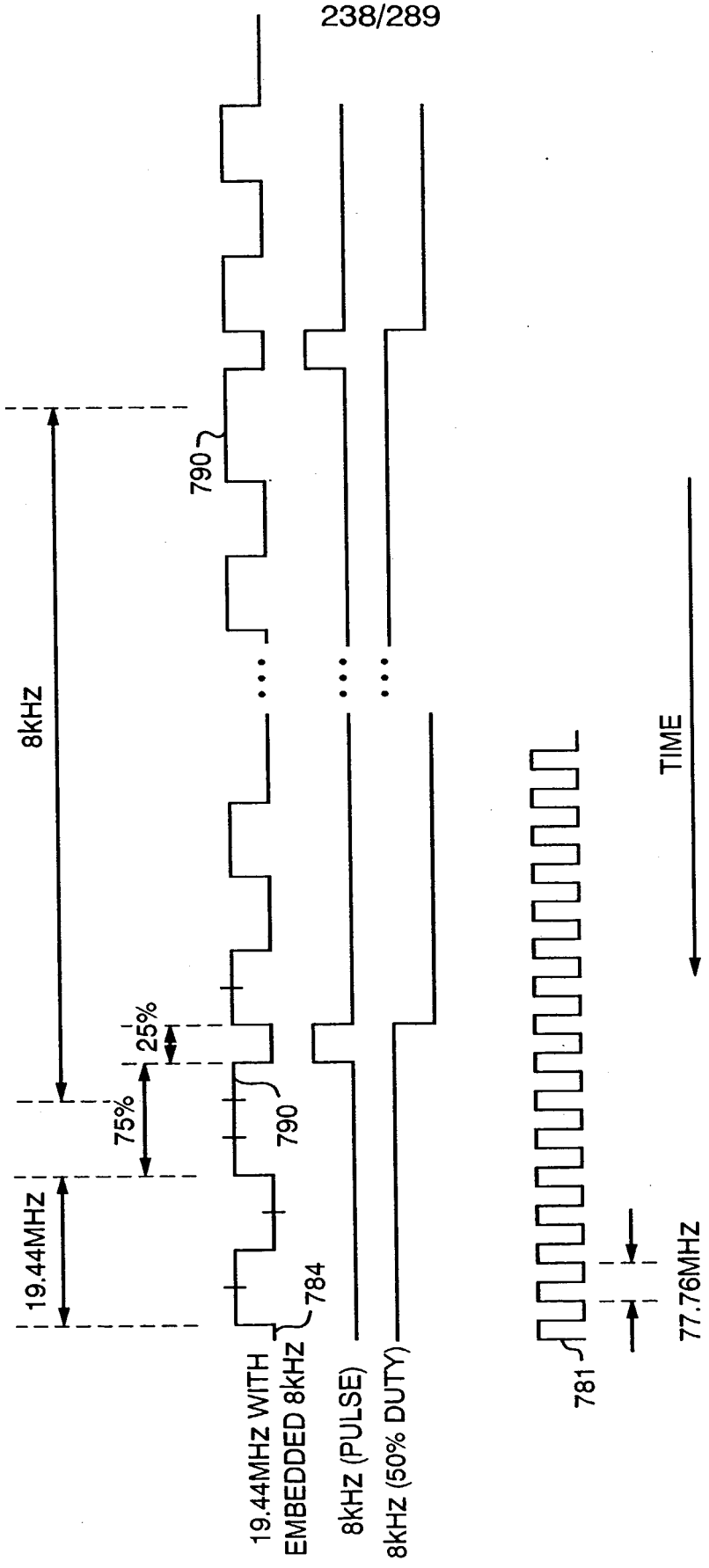

8kHz
19.44MHz
75%
25%
790
790
784
19.44MHz WITH
EMBEDDED 8kHz
8kHz (PULSE)
8kHz (50% DUTY)
781
77.76MHz
TIME

FIG. 51

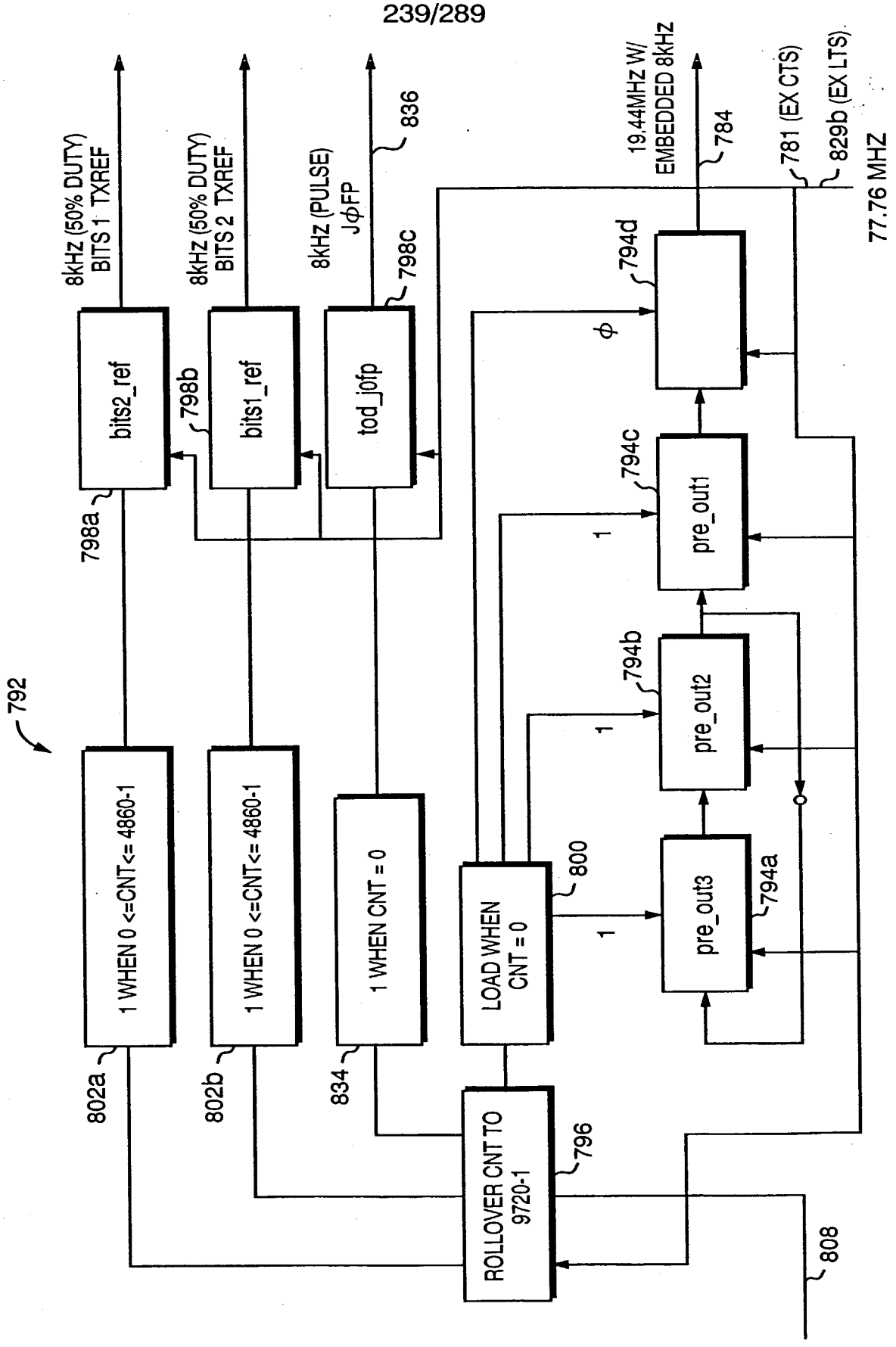

792
8kHz (50% DUTY) BITS 1 TXREF
8kHz (50% DUTY) BITS 2 TXREF
8kHz (PULSE) JΦFP
836
19.44MHz W/ EMBEDDED 8kHz
784
781 (EX CTS)
829b (EX LTS)
77.76 MHZ
bits2_ref
798b
bits1_ref
tod_jofp
798c
798a
Φ
794d
794c
pre_out1
1
794b
pre_out2
1
794a
pre_out3
1
800
LOAD WHEN CNT = 0
1 WHEN 0 <=CNT<= 4860-1
1 WHEN 0 <=CNT<= 4860-1
1 WHEN CNT = 0
802a
802b
834
ROLLOVER CNT TO 9720-1
796
808

FIG. 52

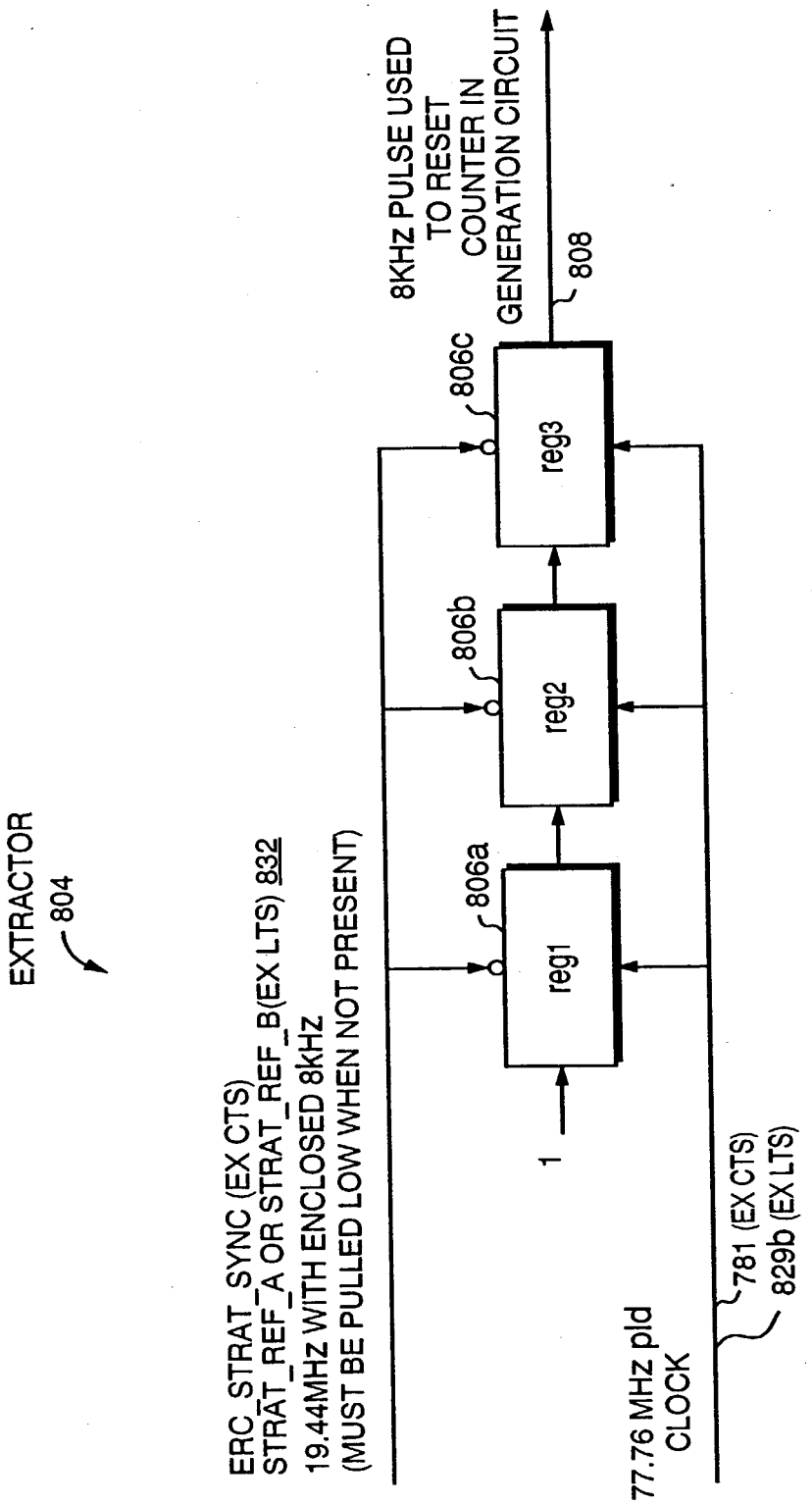

EXTRACTOR
804
ERC_STRAT_SYNC (EX CTS)
STRAT_REF_A OR STRAT_REF_B(EX LTS) 832
19.44MHz WITH ENCLOSED 8kHz
(MUST BE PULLED LOW WHEN NOT PRESENT)
77.76 MHz pld
CLOCK
781 (EX CTS)
829b (EX LTS)
1
806a
reg1
806b
reg2
806c
reg3
8KHz PULSE USED
TO RESET
COUNTER IN
GENERATION CIRCUIT
808

FIG. 53

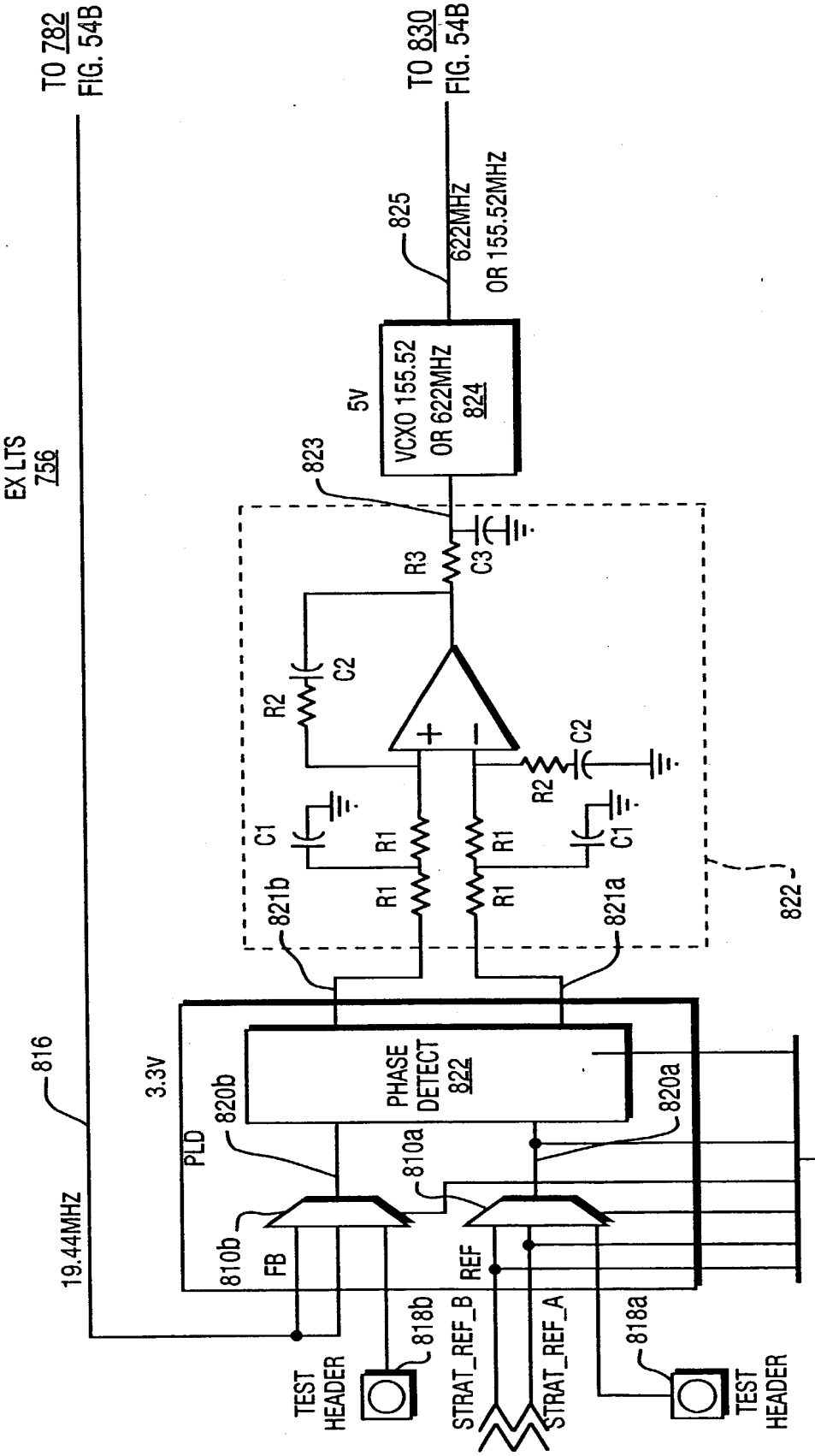

TO 782
FIG. 54B
TO 830
FIG. 54B
EX LTS
756
825
622MHz
OR 155.52MHz
5V
VCXO 155.52
OR 622MHz
824
823
R3
C3
R2
C2
C1
R1
821b
821a
822
816
3.3V
PLD
820b
PHASE
DETECT
822
820a
810a
810b
FB
REF
19.44MHz
818b
818a
STRAT_REF_B
STRAT_REF_A
TEST
HEADER
TEST
HEADER
TO
FIG. 54B

FIG. 54A

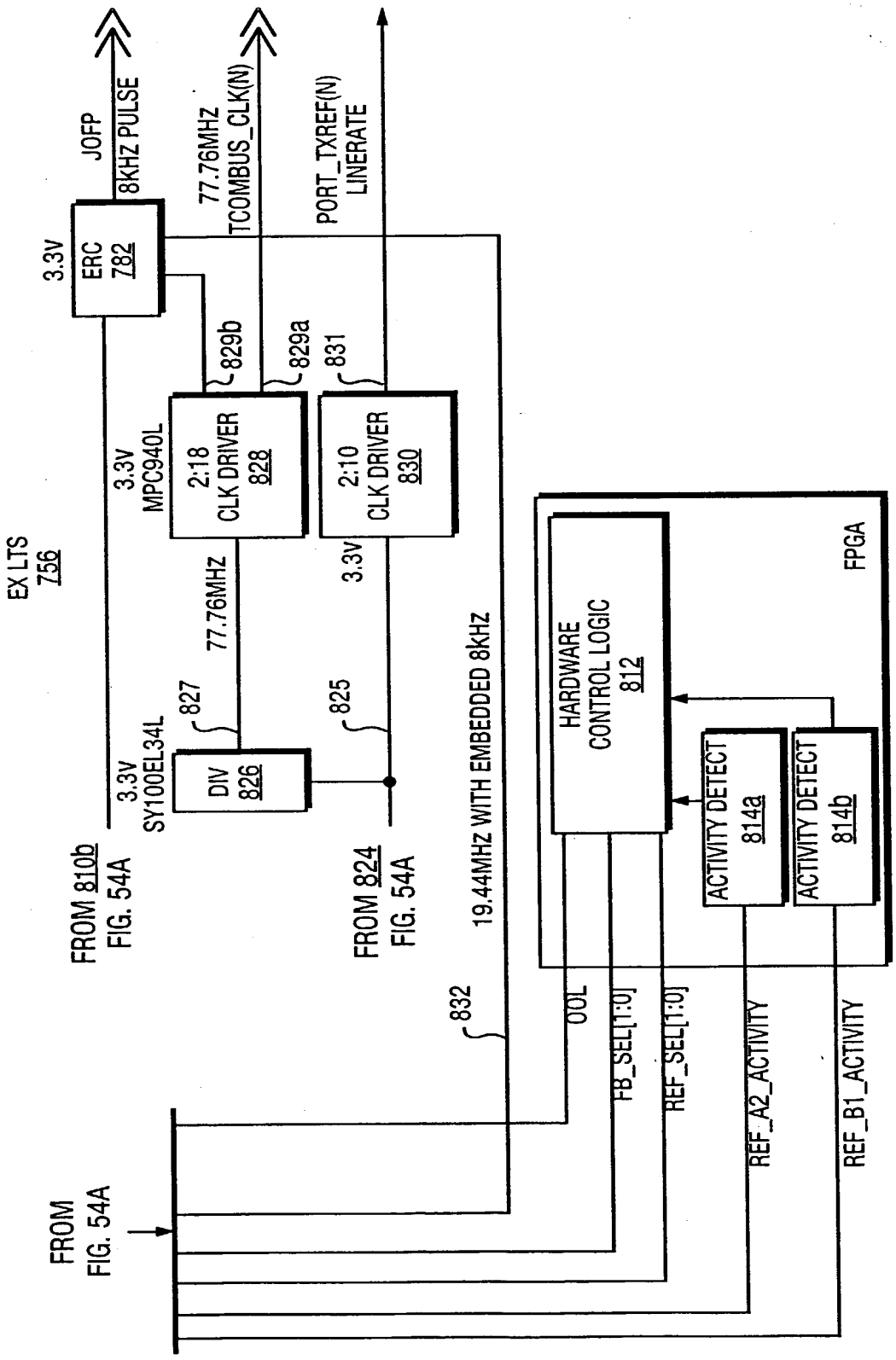

EX LTS
756
3.3V
ERC
782
JOFP
8KHZ PULSE
77.76MHZ
TCOMBUS_CLK(N)
PORT_TXREF(N)
LINERATE
3.3V
MPC940L
2:18
CLK DRIVER
828
829b
829a
831
2:10
CLK DRIVER
830
3.3V
77.76MHZ
827
825
3.3V
SY100EL34L
DIV
826
FROM 810b
FIG. 54A
FROM 824
FIG. 54A
19.44MHZ WITH EMBEDDED 8KHZ
832
HARDWARE
CONTROL LOGIC
812
FPGA
ACTIVITY DETECT
814a
ACTIVITY DETECT
814b
OOL
FB_SEL[1:0]
REF_SEL[1:0]
REF_A2_ACTIVITY
REF_B1_ACTIVITY
FROM
FIG. 54A

FIG. 54B

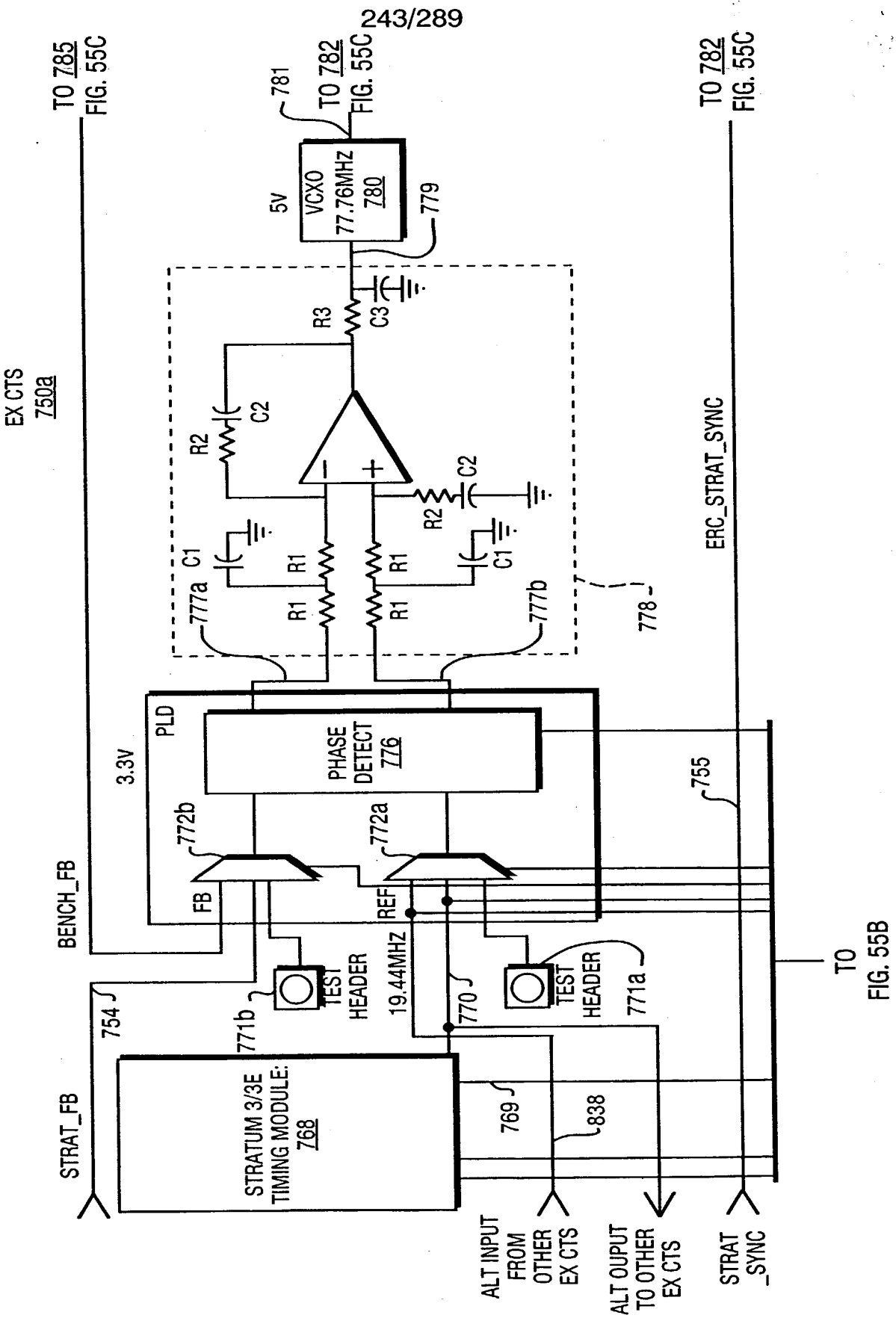

243/289
TO 785 FIG. 55C
TO 782 FIG. 55C
781
TO 782 FIG. 55C
5V
VCXO 77.76MHz 780
779
EX CTS 750a
R3
C3
C2
R2
R2
C2
C1
R1
R1
R1
R1
C1
777a
777b
778
ERC_STRAT_SYNC
PLD
3.3V
PHASE DETECT 776
755
772b
772a
BENCH_FB
FB
REF
TEST HEADER
19.44MHz
770
TEST HEADER
771a
754
771b
STRAT_FB
STRATUM 3/3E TIMING MODULE 768
769
838
TO FIG. 55B
ALT INPUT FROM OTHER EX CTS
ALT OUPUT TO OTHER EX CTS
STRAT _SYNC

FIG. 55A

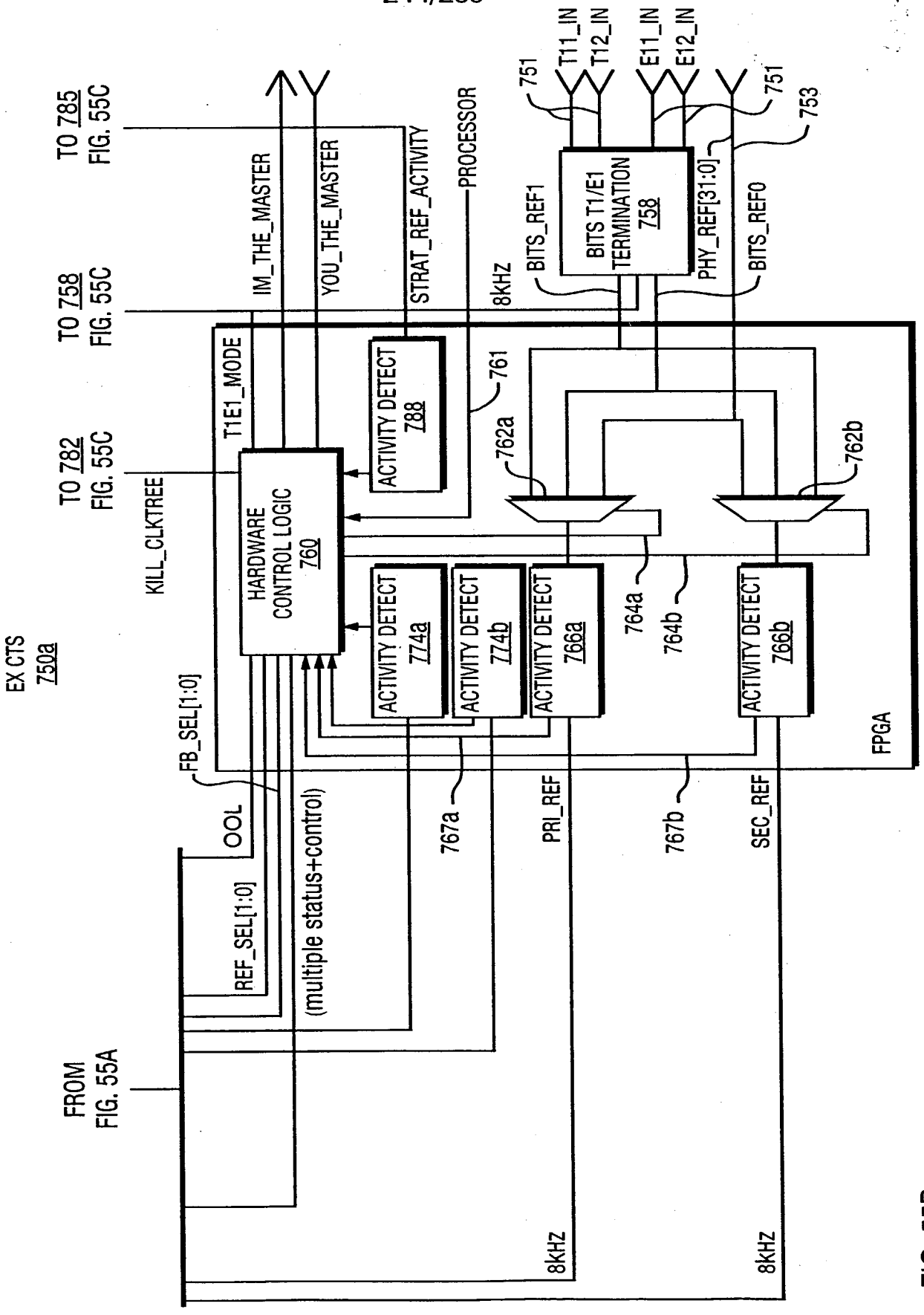

EX CTS
750a
TO 785
FIG. 55C
TO 758
FIG. 55C
TO 782
FIG. 55C
FROM
FIG. 55A
KILL_CLKTREE
HARDWARE
CONTROL LOGIC
760
T1E1_MODE
IM_THE_MASTER
YOU_THE_MASTER
STRAT_REF_ACTIVITY
PROCESSOR
8kHZ
ACTIVITY DETECT
788
761
751
T11_IN
T12_IN
E11_IN
E12_IN
BITS_REF1
BITS T1/E1
TERMINATION
758
PHY_REF[31:0]
BITS_REF0
753
762a
762b
ACTIVITY DETECT
774a
ACTIVITY DETECT
774b
ACTIVITY DETECT
766a
ACTIVITY DETECT
766b
764a
764b
FPGA
FB_SEL[1:0]
OOL
REF_SEL[1:0]
(multiple status+control)
767a
767b
PRI_REF
SEC_REF
8kHZ
8kHZ

FIG. 55B

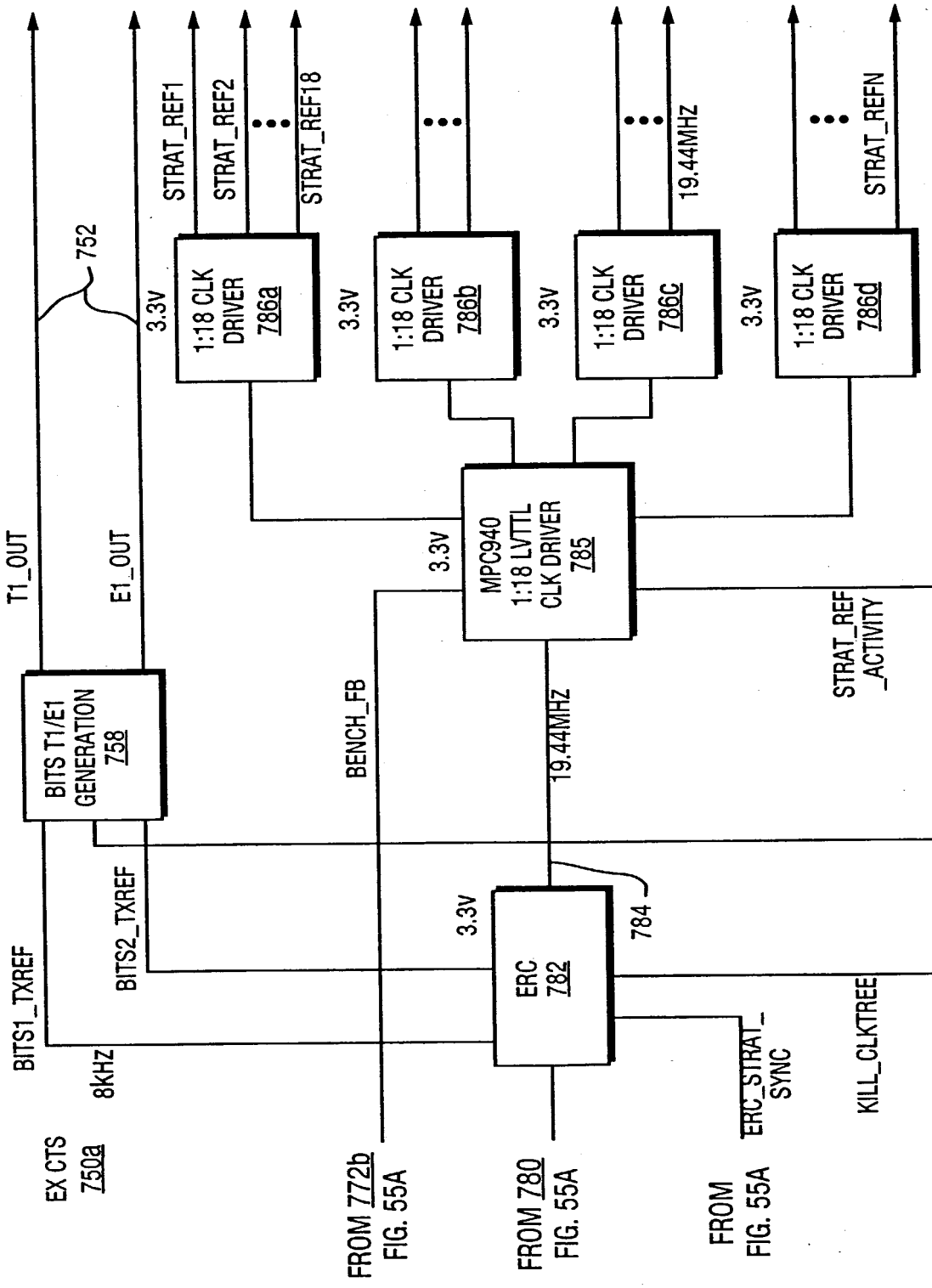

T1_OUT
E1_OUT
752
BITS T1/E1 GENERATION Z58
BITS1_TXREF
BITS2_TXREF
8kHZ
EX CTS Z50a
3.3V
1:18 CLK DRIVER Z86a
STRAT_REF1
STRAT_REF2
STRAT_REF18
1:18 CLK DRIVER Z86b
1:18 CLK DRIVER Z86c
19.44MHz
1:18 CLK DRIVER Z86d
STRAT_REFN
MPC940 1:18 LVTTL CLK DRIVER Z85
BENCH_FB
19.44MHz
784
ERC Z82
ERC_STRAT_SYNC
KILL_CLKTREE
STRAT_REF_ACTIVITY
FROM Z72b FIG. 55A
FROM Z80 FIG. 55A
FROM FIG. 55A
FROM Z88 FIG. 55B
FROM Z58 FIG. 55B
FROM Z60 FIG. 55B

FIG. 55C

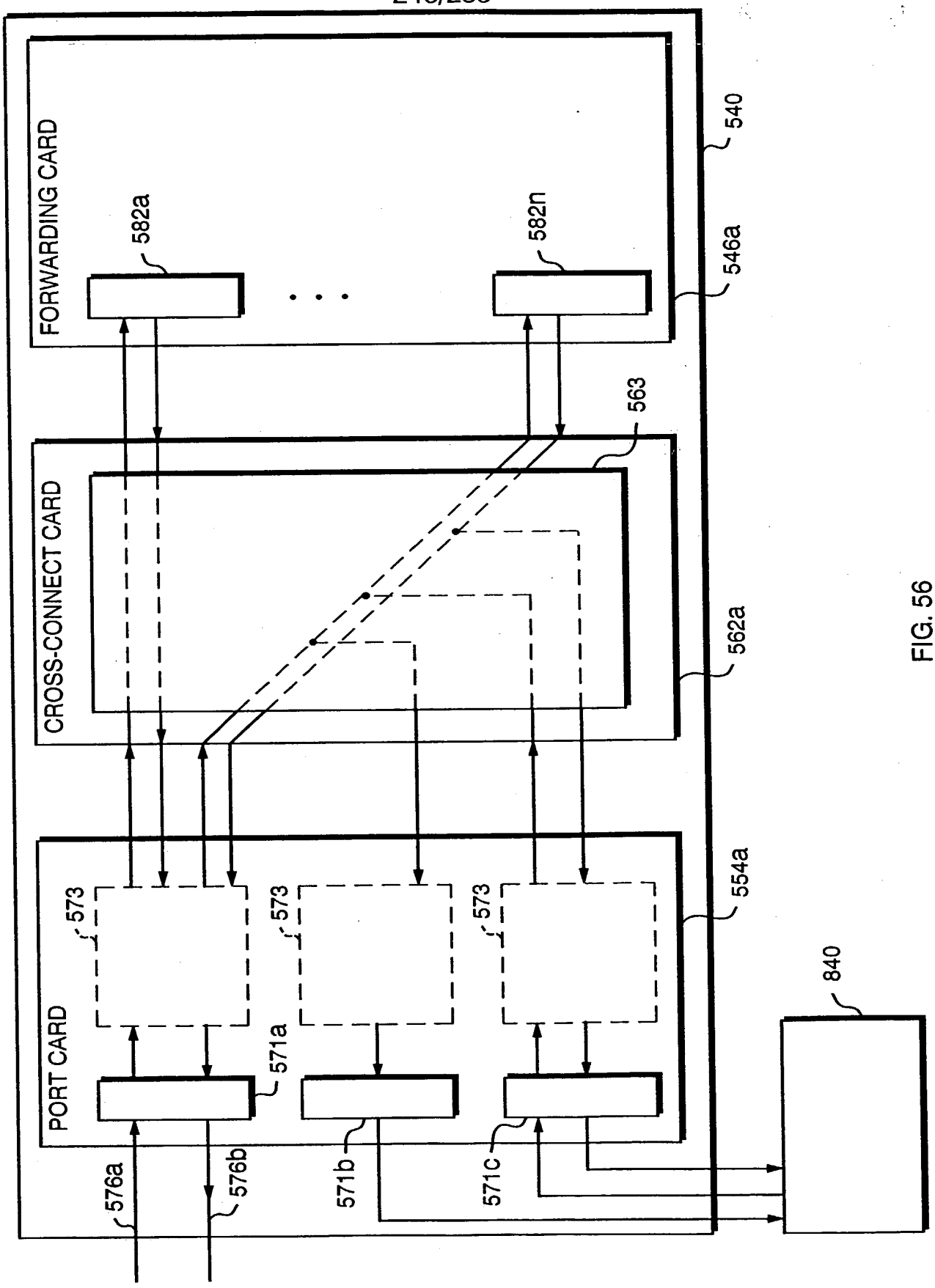

FORWARDING CARD
582a
582n
546a
540
563
CROSS-CONNECT CARD
562a
PORT CARD
573
573
573
554a
571a
571b
571c
576a
576b
840

FIG. 56

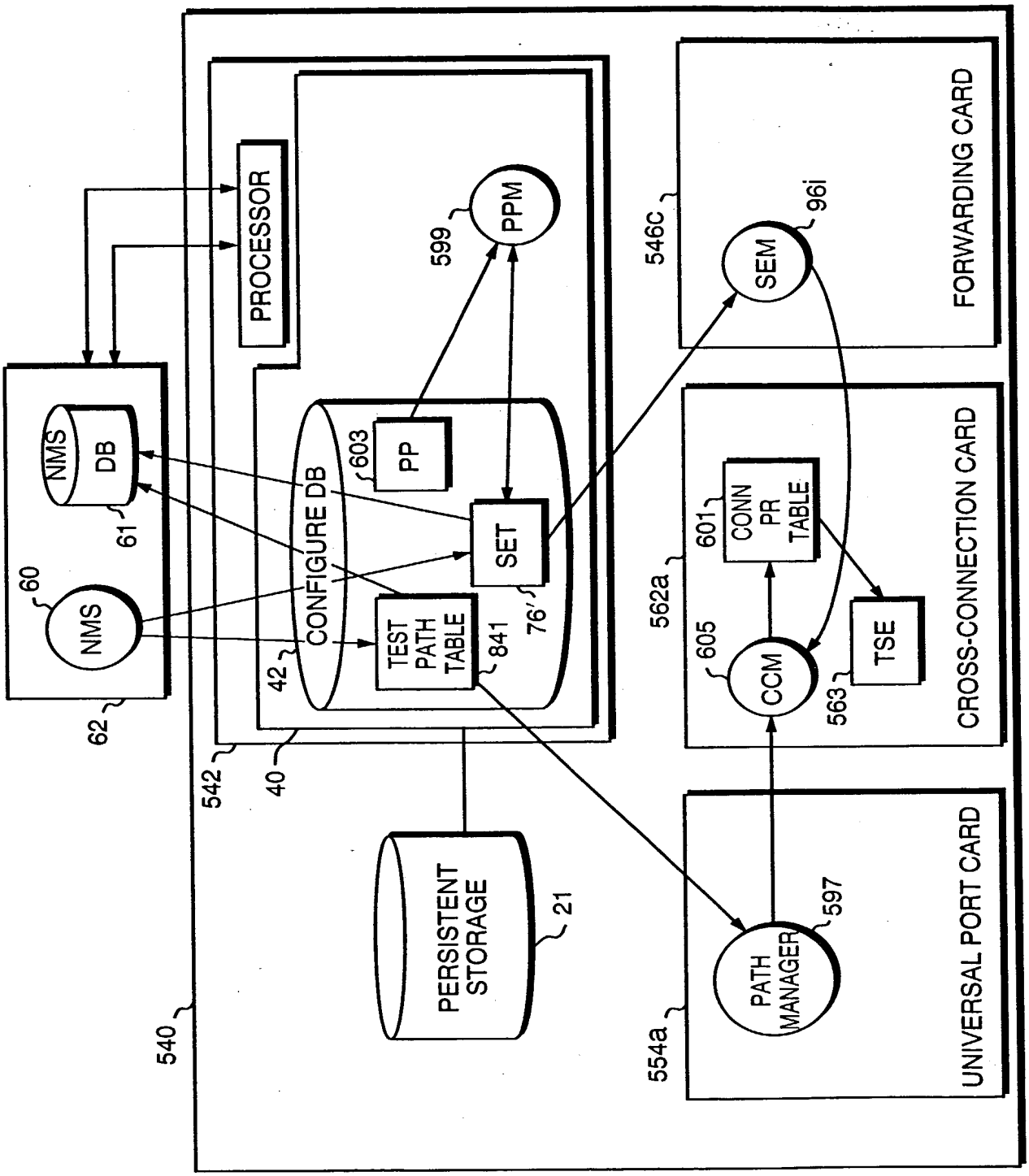

540
542
40
PROCESSOR
CONFIGURE DB
42
599
PPM
603
PP
SET
76'
TEST PATH TABLE
841
PERSISTENT STORAGE
21
NMS
DB
61
60
NMS
62
546c
SEM
96i
FORWARDING CARD
562a
601
CONN PR TABLE
605
CCM
563
TSE
CROSS-CONNECTION CARD
554a
PATH MANAGER
597
UNIVERSAL PORT CARD

FIG. 57

TEST PATH TABLE 841

	PATH LID	UP PORT LID	TIME SLOT	# OF TIME SLOTS	MONITOR	ENABLE PORT RECEIVER	...
842	1666	1232	4	3	INGRESS	NO	
843	1666	1233	4	3	EGRESS	NO	
844	1666	1233	4	3	INGRESS	YES	
	. . .	. . .	. . .	. . .			. . .

844 845

FIG. 58

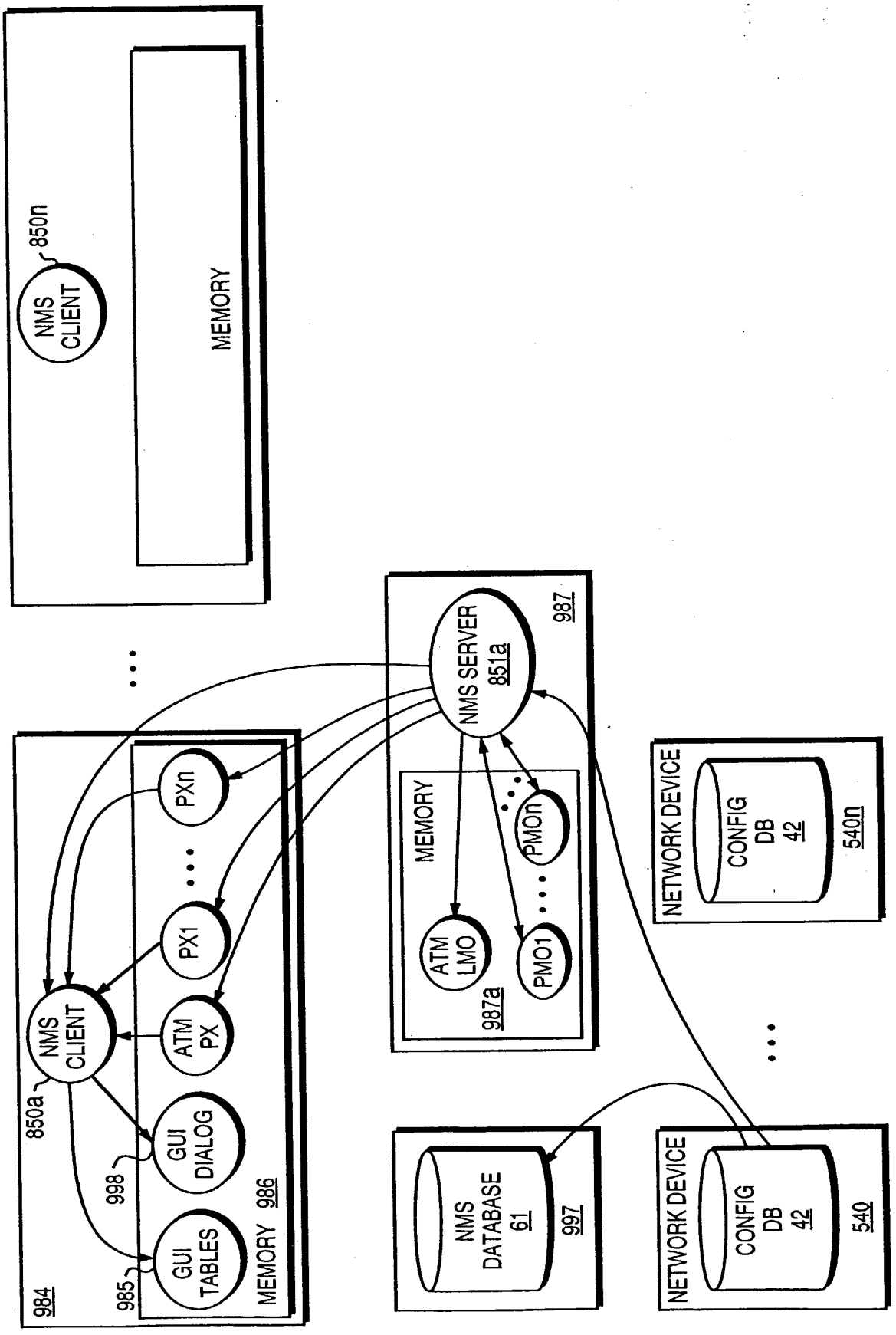

850n
NMS CLIENT
MEMORY
984
850a
NMS CLIENT
GUI TABLES
985
998
GUI DIALOG
ATM PX
PX1
PXn
MEMORY 986
NMS SERVER 851a
987
MEMORY
ATM LMO
987a
PMO1
PMOn
NMS DATABASE 61
997
NETWORK DEVICE
CONFIG DB 42
540
NETWORK DEVICE
CONFIG DB 42
540n

FIG. 59

MANAGED DEVICE TABLE 983

983b PID	A1	• • •	An
1			

983a

FIG 60A

CHASSIS TABLE 988

988b PID	A1	• • •	An	MANAGED DEVICE PID (988c)
1				1 (988a)
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG 60B

SHELF TABLE 989

989a PID	A1	• • •	An	CHASSIS PID (989b)
3				2
4				2
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
18				2

FIG 60C

SLOT TABLE 990

990a PID	A1	• • •	An	SHELF PID (990b)
990c 20				3
21				3
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
990d 116				18

FIG 60D

CARD TABLE 47'

47a PID	CWD TYPE	VERSION NO.	47b SLOT PID	...
120	0XF002	3	20	
121	0XF002	4	21	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
124	0X6002	1	24	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
131	0XF002	1	31	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG 60E

PORT TABLE 49'

49a PID	PORT TYPE	VERSION NO.	49b CARD PID	...
300	00620	1	20	
301	00620	1	20	
302	00620	1	20	
303	00620	1	20	
304	00820	1	20	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•
400	OO620	1	39	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG 60F

SONET PATH TABLE 600'

600a PATH LID	PORT LID (600b)	TIME SLOT	# OF TIME SLOTS	...
901	304	4	3	
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG. 60G

SERVICE ENDPOINT TABLE 76''

76a SE LID	Q #	FC PID (76c)	FC SLICE PID (76d)	FC TIME SLOT (76e)	PATH LID (76b)	...
3000					901	
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•

FIG. 60H

ATM IF TABLE 114''

114a ATM IF LID	ATM GROUP LID	SE LID (114b)	...
5054		3000	...
•	•	•	...
•	•	•	
•	•	•	

FIG. 60I

VIRTUAL ATM IF TABLE 993

993a LID	A1	• • •	An	993b ATM IF LID
7489				5054
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG 60J

VIRTUAL CONNECTION TABLE 994

994a LID	A1	• • •	An	994b VIR. ATM IF LID
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

FIG 60K

VIRTUAL LINK TABLE 995

995a LID	A1	• • •	An	995b VIR. CONN. LID	995c CROSS. CONN. LID
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•

FIG 60L

CROSS-CONNECT TABLE 996

996a LID	A1	• • •	An	996b VIR. LINK1 LID	996c VIR. LINK2 LID
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•

FIG 60M

ATM NODE TABLE 999

999a LID	A1	• • •	An	999b MANAGED DEVICE PID	999c
5000				1	

FIG 60N

PHYSICAL MANAGED OBJECT 991

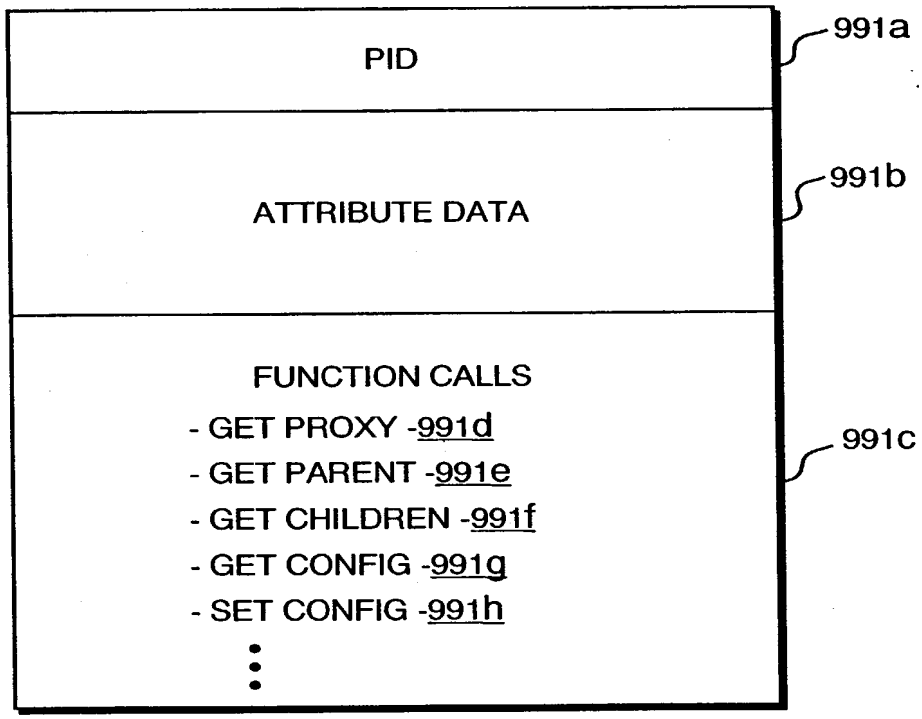


FIG. 61A

PROXY 992

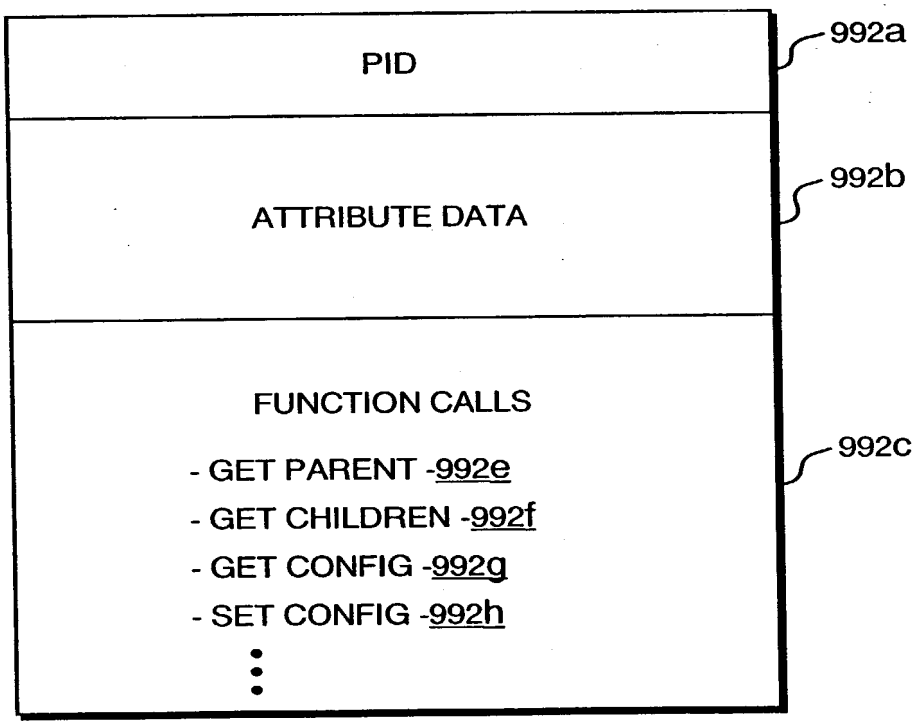


FIG. 61B

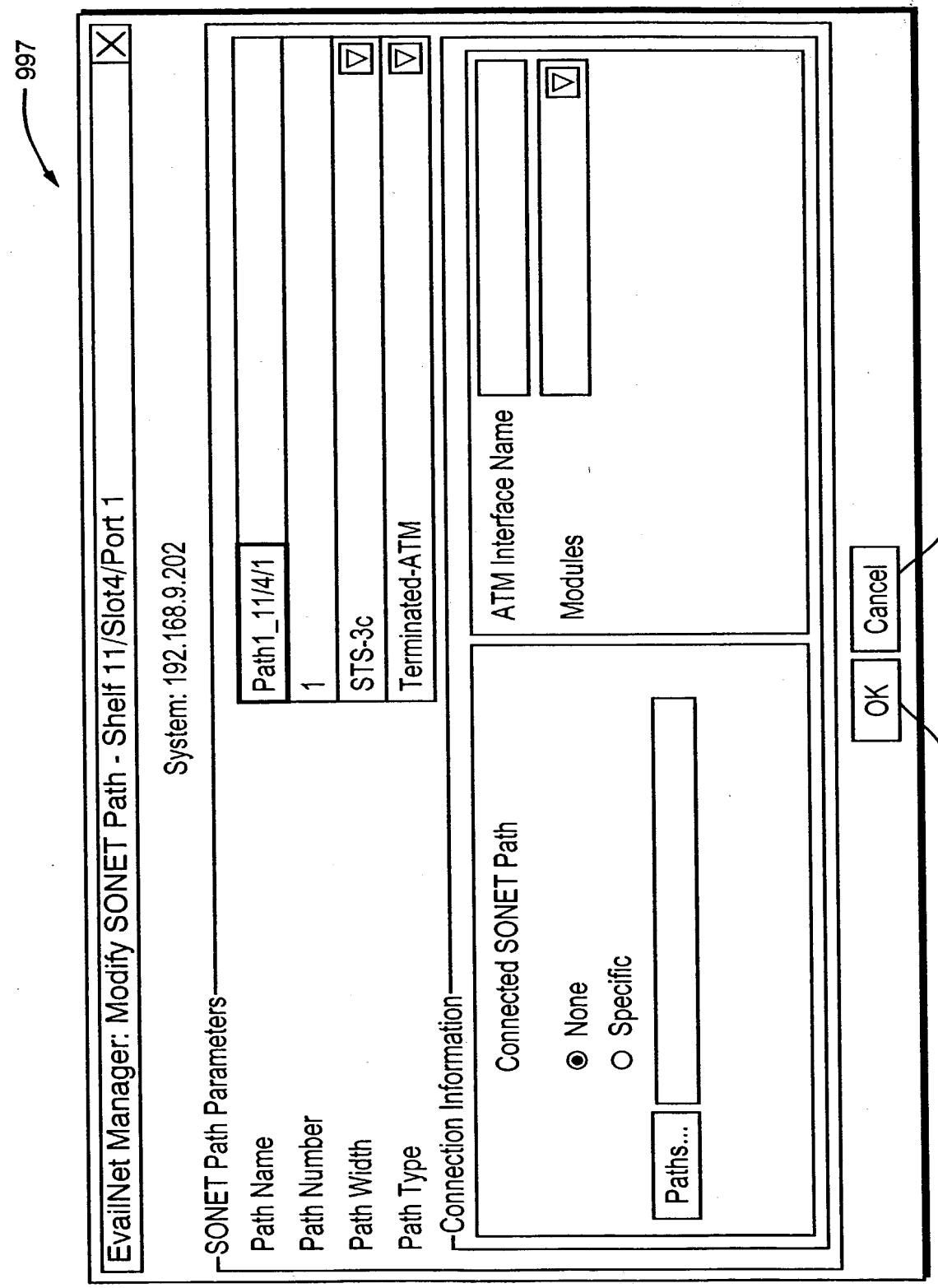

997
EvailNet Manager: Modify SONET Path - Shelf 11/Slot4/Port 1
System: 192.168.9.202
SONET Path Parameters
Path Name
Path Number
Path Width
Path Type
Path1_11/4/1
1
STS-3c
Terminated-ATM
Connection Information
Connected SONET Path
None
Specific
Paths...
ATM Interface Name
Modules
OK
Cancel
997a
998b

FIG. 62

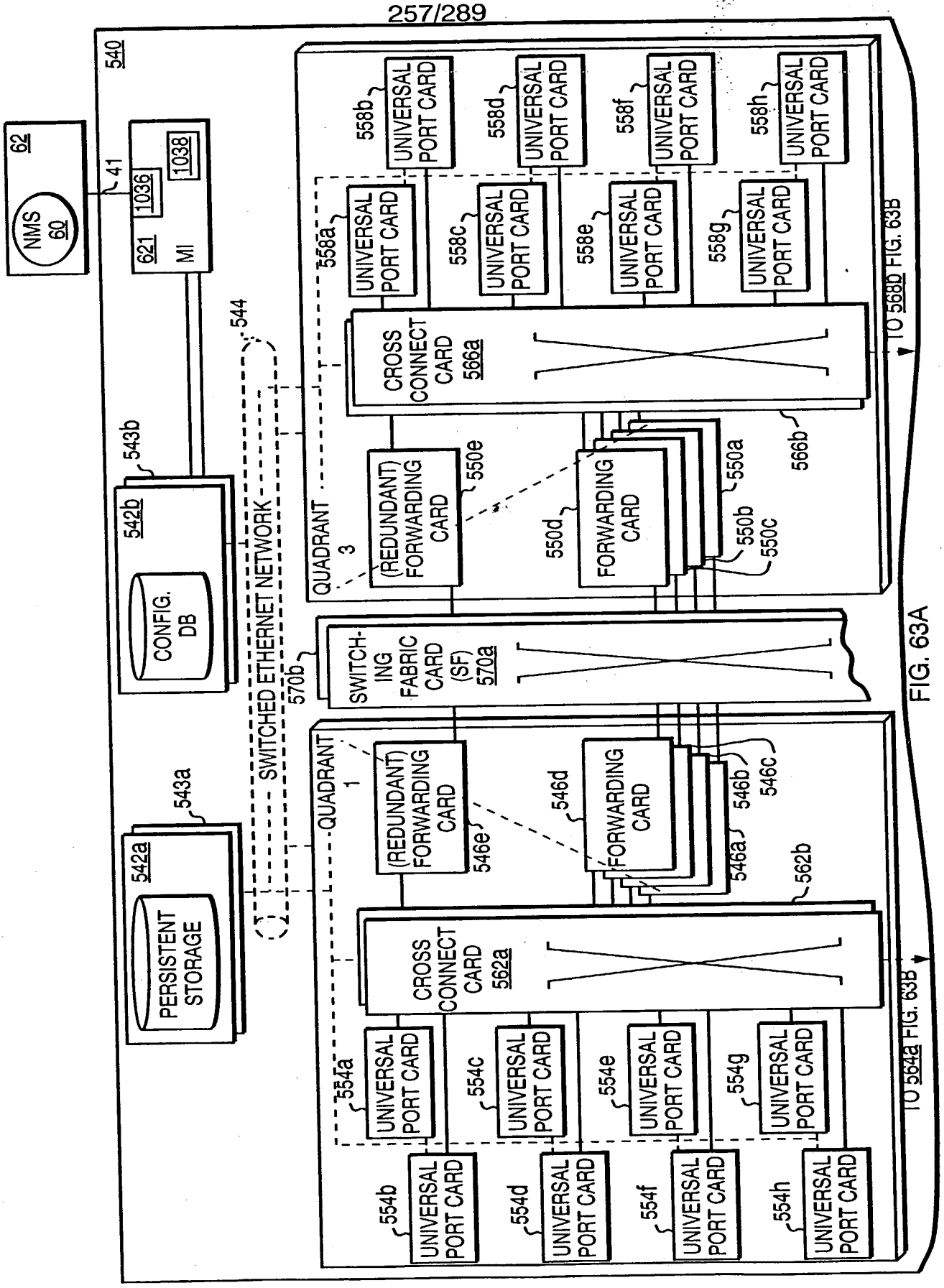

62
NMS 60
41
540
621
MI
1036
1038
543b
542b
CONFIG. DB
544
SWITCHED ETHERNET NETWORK
543a
542a
PERSISTENT STORAGE
570b
SWITCH-ING FABRIC CARD (SF) 570a
QUADRANT 3
QUADRANT 1
(REDUNDANT) FORWARDING CARD
FORWARDING CARD
CROSS CONNECT CARD 566a
CROSS CONNECT CARD 562a
UNIVERSAL PORT CARD
558a
558b
558c
558d
558e
558f
558g
558h
554a
554b
554c
554d
554e
554f
554g
554h
550a
550b
550c
550d
550e
546a
546b
546c
546d
546e
562b
566b
TO 568D FIG. 63B
TO 564a FIG. 63B

FIG. 63A

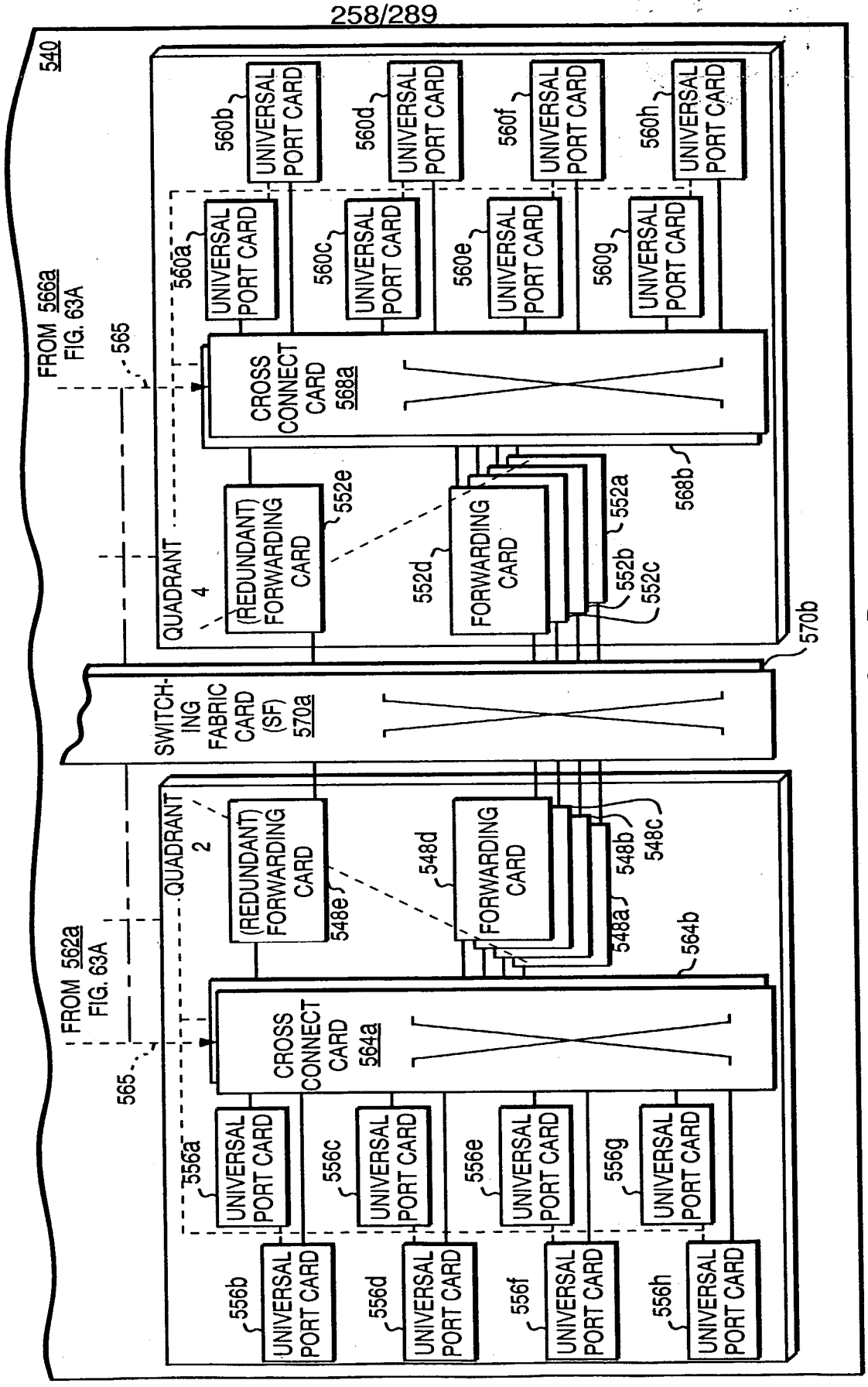

540
FROM 562a FIG. 63A
565
QUADRANT 2
(REDUNDANT) FORWARDING CARD 548e
FORWARDING CARD 548d
548a
548b
548c
564b
CROSS CONNECT CARD 564a
556a UNIVERSAL PORT CARD
556c UNIVERSAL PORT CARD
556e UNIVERSAL PORT CARD
556g UNIVERSAL PORT CARD
556b UNIVERSAL PORT CARD
556d UNIVERSAL PORT CARD
556f UNIVERSAL PORT CARD
556h UNIVERSAL PORT CARD
SWITCHING FABRIC CARD (SF) 570a
570b
FROM 566a FIG. 63A
565
QUADRANT 4
(REDUNDANT) FORWARDING CARD 552e
FORWARDING CARD 552d
552a
552b
552c
568b
CROSS CONNECT CARD 568a
560a UNIVERSAL PORT CARD
560c UNIVERSAL PORT CARD
560e UNIVERSAL PORT CARD
560g UNIVERSAL PORT CARD
560b UNIVERSAL PORT CARD
560d UNIVERSAL PORT CARD
560f UNIVERSAL PORT CARD
560h UNIVERSAL PORT CARD

FIG. 63B

ADMINISTRATION MANAGED DEVICE TABLE 1014'

1014a' LID	HOST ADDRESS	PORT ADDRESS	RETRY	TIMEOUT	ADMIN. PASSWORD	PROV. PASSWORD	VIEWER PASSWORD	1014e' PHYSICAL ID	1014f' PHYSICAL ID
9046	192.168.9.202	1521			TEAM 1	TEAM 2	TEAM 3		
...	...	...	...	...	...	...	...	...	...

FIG. 64

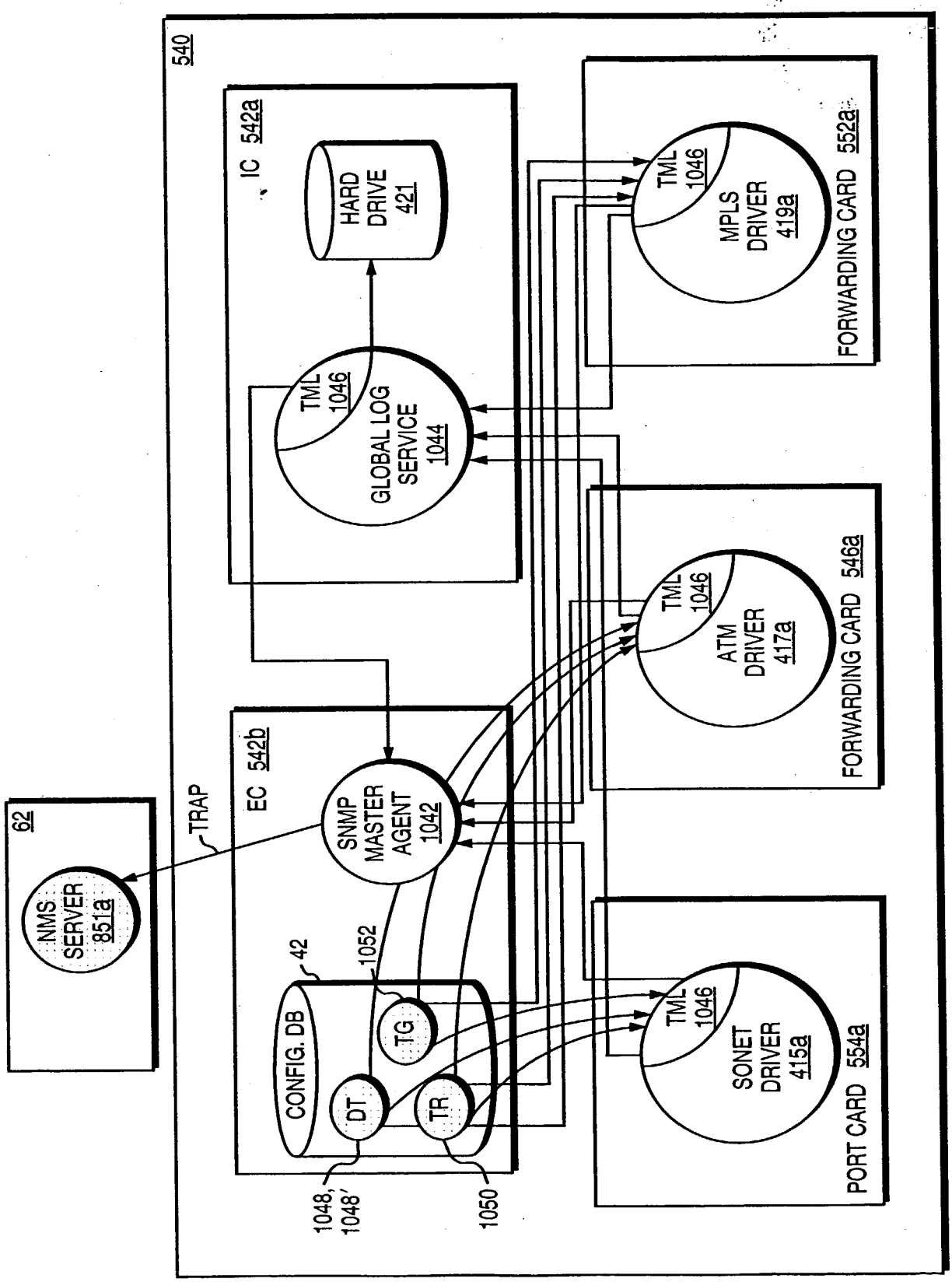

540
IC 542a
HARD DRIVE 421
TML 1046
GLOBAL LOG SERVICE 1044
FORWARDING CARD 552a
TML 1046
MPLS DRIVER 419a
FORWARDING CARD 546a
TML 1046
ATM DRIVER 417a
PORT CARD 554a
TML 1046
SONET DRIVER 415a
EC 542b
SNMP MASTER AGENT 1042
CONFIG. DB
42
1052
TG
DT
TR
1048, 1048'
1050
TRAP
62
NMS SERVER 851a

FIG. 65

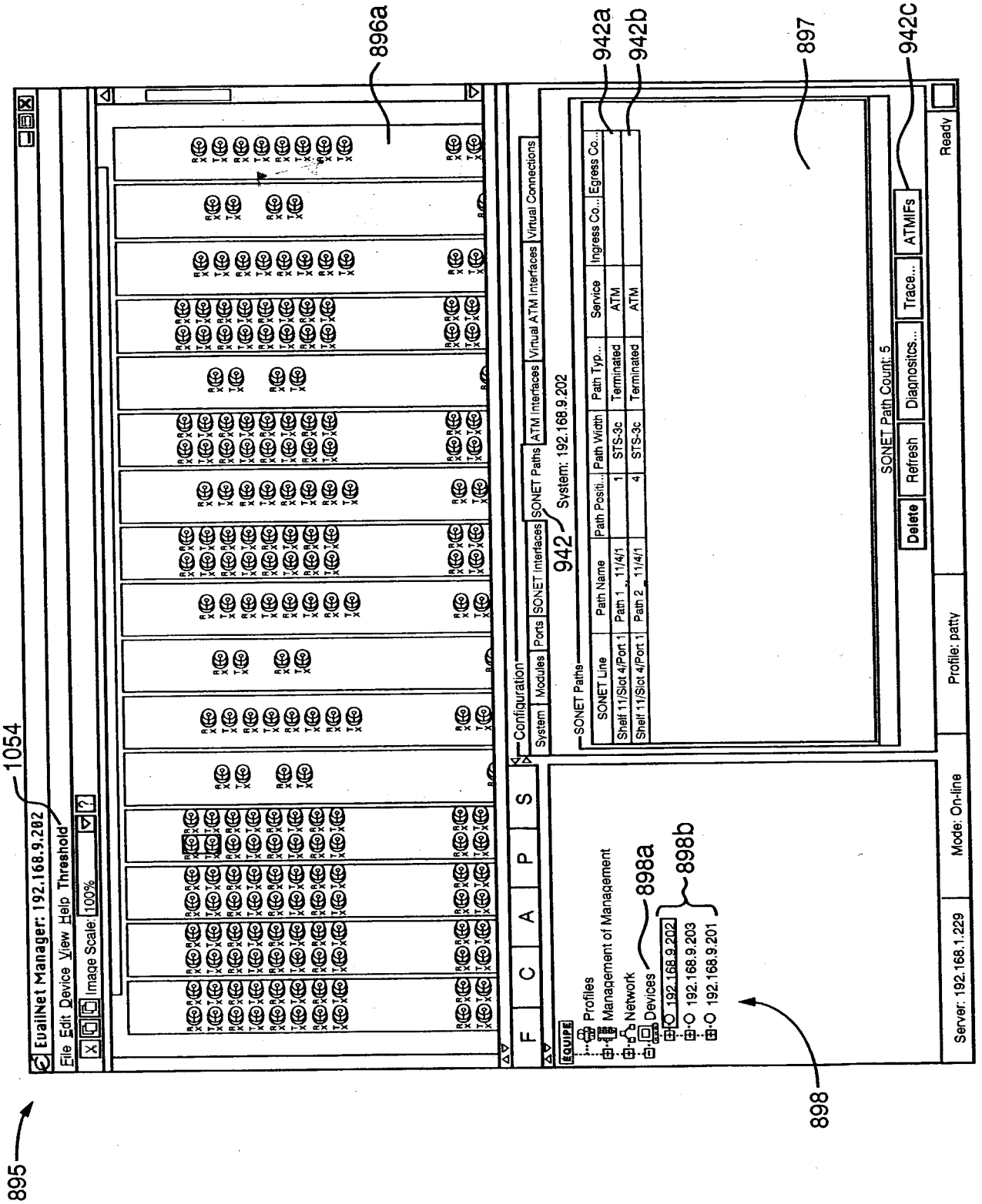

895
1054
896a
942a
942b
897
942c
898
898a
898b
EvalNet Manager: 192.168.9.282
File Edit Device View Help Threshold
Image Scale: 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.168.9.202
942
SONET Paths
SONET Line
Path Name
Path Positi...
Path Width
Path Typ...
Service
Ingress Co...
Egress Co...
Shelf 11/Slot 4/Port 1
Path 1
11/4/1
1
STS-3c
Terminated
ATM
Shelf 11/Slot 4/Port 1
Path 2
11/4/1
4
STS-3c
Terminated
ATM
SONET Path Count: 5
Delete
Refresh
Diagnositcs...
Trace...
ATMIFs
Ready
Profile: patty
Mode: On-line
Server: 192.168.1.229
F C A P S
EQUIPE
Profiles
Management of Management
Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201

FIG. 66A

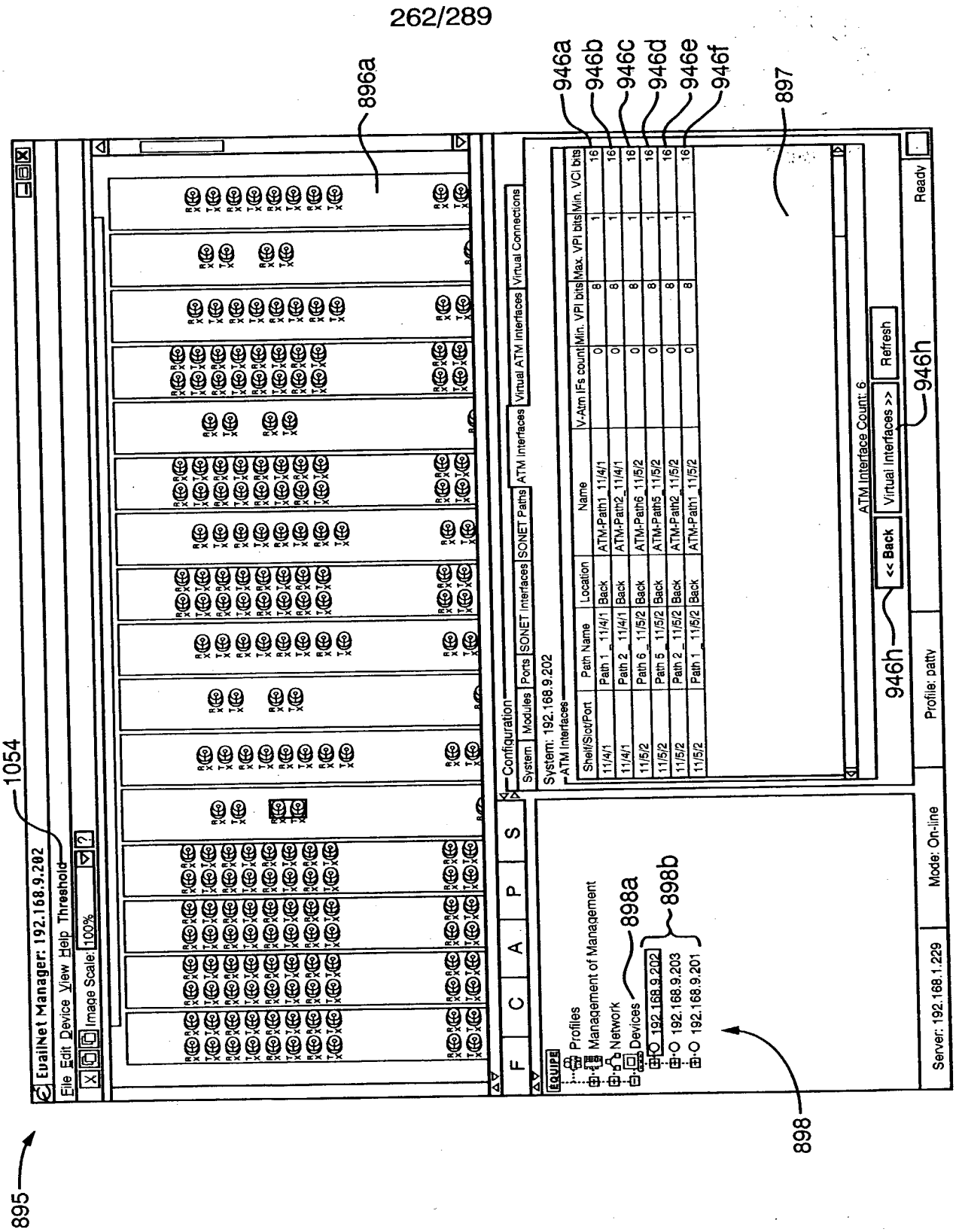

EnvisaNet Manager: 192.168.9.202
File Edit Device View Help Threshold
Image Scale: 100%
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
ATM Interfaces
Shelf/Slot/Port | Path Name | Location | Name | V-Atm IFs count | Min. VPI bits | Max. VPI bits | Min. VCI bits
11/4/1 | Path 1 _11/4/1 | Back | ATM-Path1_11/4/1 | 0 | 8 | 1 | 16
11/4/1 | Path 2 _11/4/1 | Back | ATM-Path2_11/4/1 | 0 | 8 | 1 | 16
11/5/2 | Path 6 _11/5/2 | Back | ATM-Path6_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 5 _11/5/2 | Back | ATM-Path5_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 2 _11/5/2 | Back | ATM-Path2_11/5/2 | 0 | 8 | 1 | 16
11/5/2 | Path 1 _11/5/2 | Back | ATM-Path1_11/5/2 | 0 | 8 | 1 | 16
ATM Interface Count: 6
<< Back
Virtual Interfaces >>
Refresh
Ready
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.203
192.168.9.201
Server: 192.168.1.229
Mode: On-line
Profile: patty
1054
895
896a
897
898
898a
898b
946a
946b
946c
946d
946e
946f
946h
946h

FIG. 66B

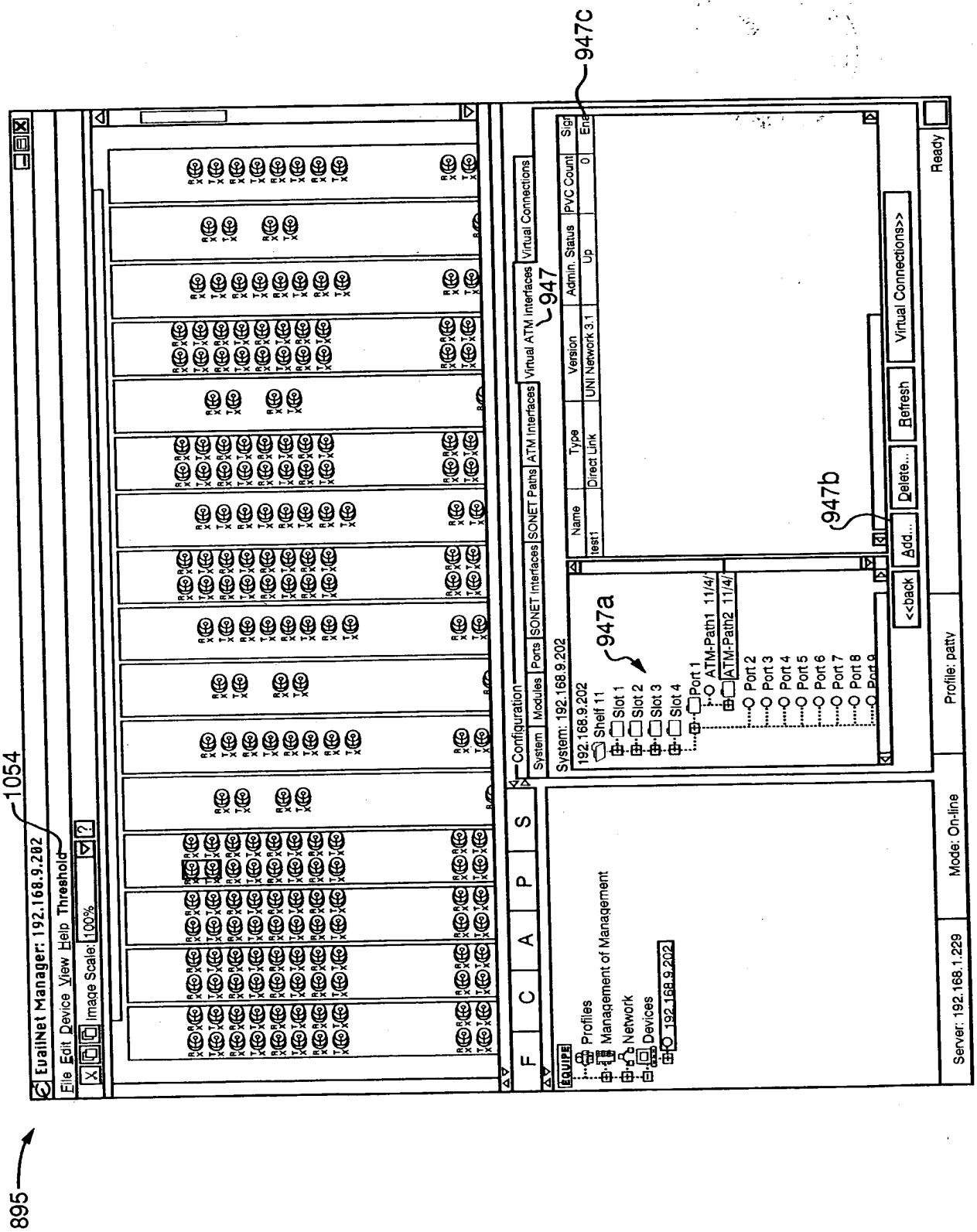

895
1054
947c
947
947a
947b
EvalNet Manager: 192.168.9.282
File Edit Device View Help Threshold
Image Scale: 100%
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfaces Virtual ATM Interfaces Virtual Connections
System: 192.168.9.202
192.168.9.202
Shelf 11
Slot 1
Slot 2
Slot 3
Slot 4
Port 1
ATM-Path1 11/4/
ATM-Path2 11/4/
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Name
Type
Version
Admin. Status
PVC Count
test1
Direct Link
UNI Network 3.1
Up
0
<<back
Add...
Delete...
Refresh
Virtual Connections>>
Ready
Profiles
Management of Management
Network
Devices
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty

FIG. 66C

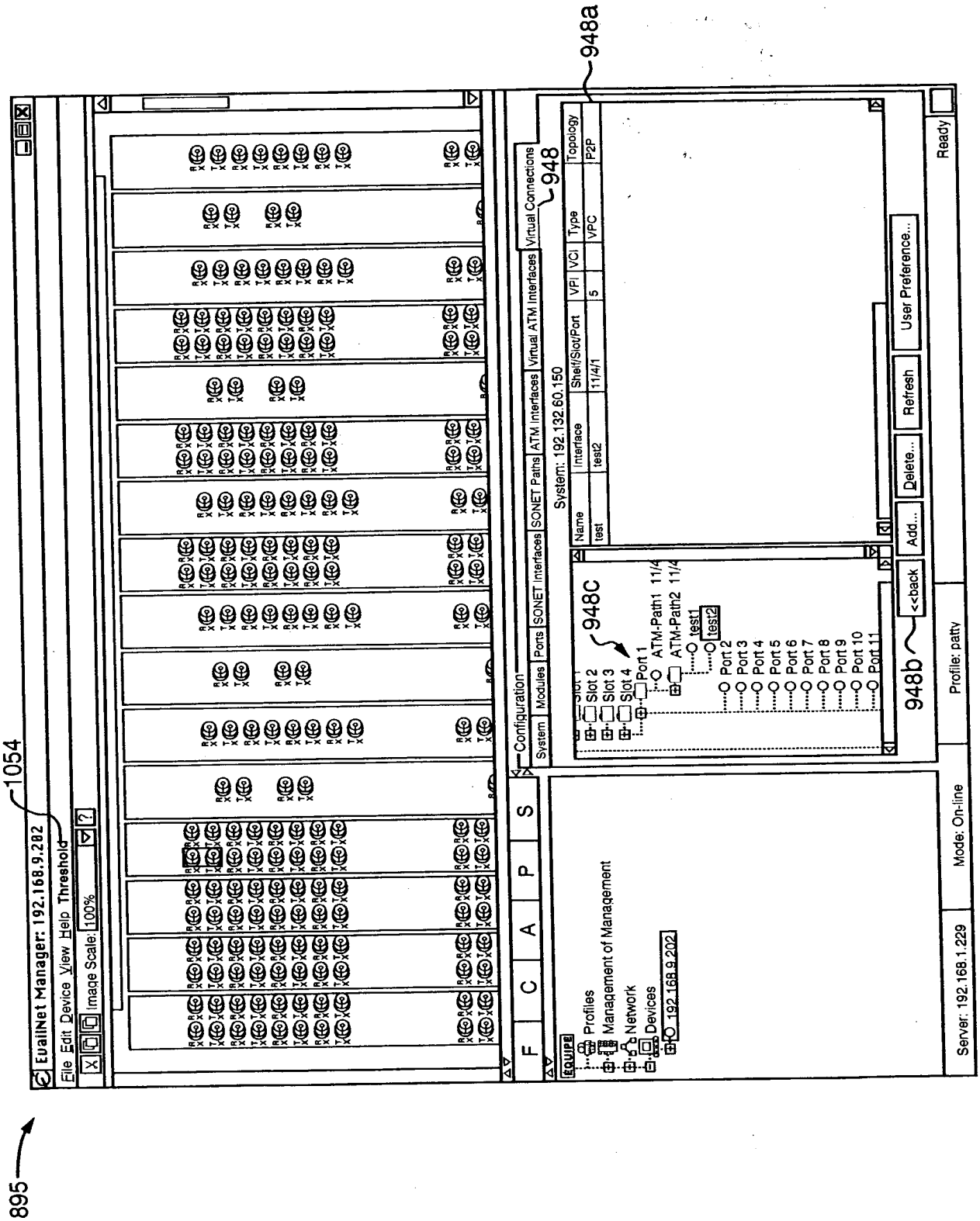

895
1054
948a
948
948b
948c
EvalNet Manager: 192.168.9.282
File Edit Device View Help Threshold
Image Scale: 100%
Configuration
System
Modules
Ports
SONET Interfaces
SONET Paths
ATM Interfaces
Virtual ATM Interfaces
Virtual Connections
System: 192.132.60.150
Name
Interface
Shelf/Slot/Port
VPI
VCI
Type
Topology
test
test2
11/4/1
5
VPC
P2P
Add...
Delete...
Refresh
User Preference...
<<back
Slot 1
Slot 2
Slot 3
Slot 4
Port 1
ATM-Path1 11/4
ATM-Path2 11/4
test1
test2
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Port 9
Port 10
Port 11
Profiles
Management of Management Network
Devices
192.168.9.202
Server: 192.168.1.229
Mode: On-line
Profile: patty
Ready

FIG. 66D

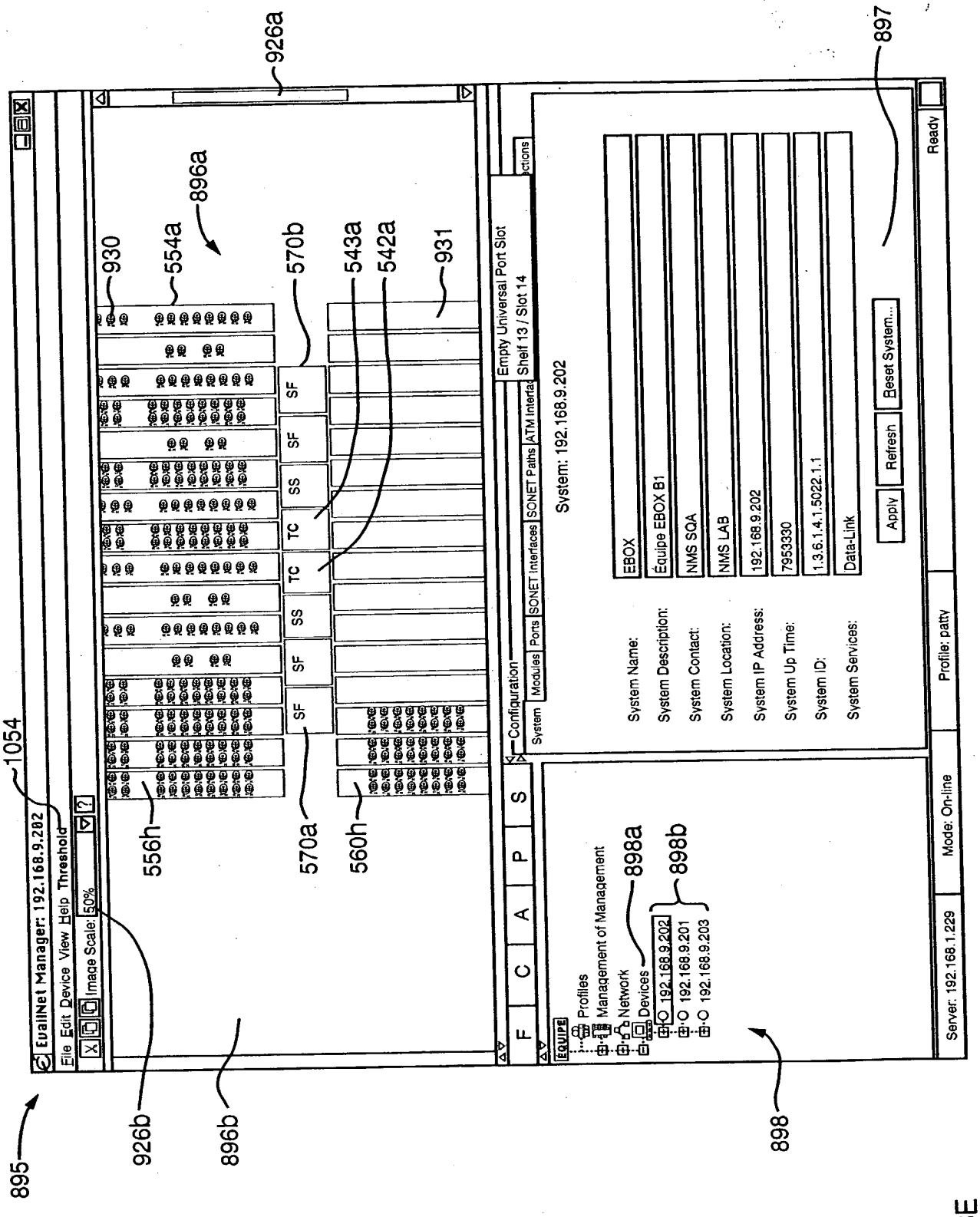

926a
897
896a
930
554a
570b
543a
542a
931
1054
556h
570a
560h
926b
896b
895
898
898a
898b
EvalINet Manager: 192.168.9.282
File Edit Device View Help Threshold
Image Scale: 50%
Empty Universal Port Slot
Shelf 13 / Slot 14
Configuration
System Modules Ports SONET Interfaces SONET Paths ATM Interfa
System: 192.168.9.202
System Name: EBOX
System Description: Équipe EBOX B1
System Contact: NMS SQA
System Location: NMS LAB
System IP Address: 192.168.9.202
System Up Time: 7953330
System ID: 1.3.6.1.4.1.5022.1.1
System Services: Data-Link
Apply
Refresh
Reset System...
Profiles
Management of Management Network
Devices
192.168.9.202
192.168.9.201
192.168.9.203
Ready
Server: 192.168.1.229
Mode: On-line
Profile: patty

FIG. 66E

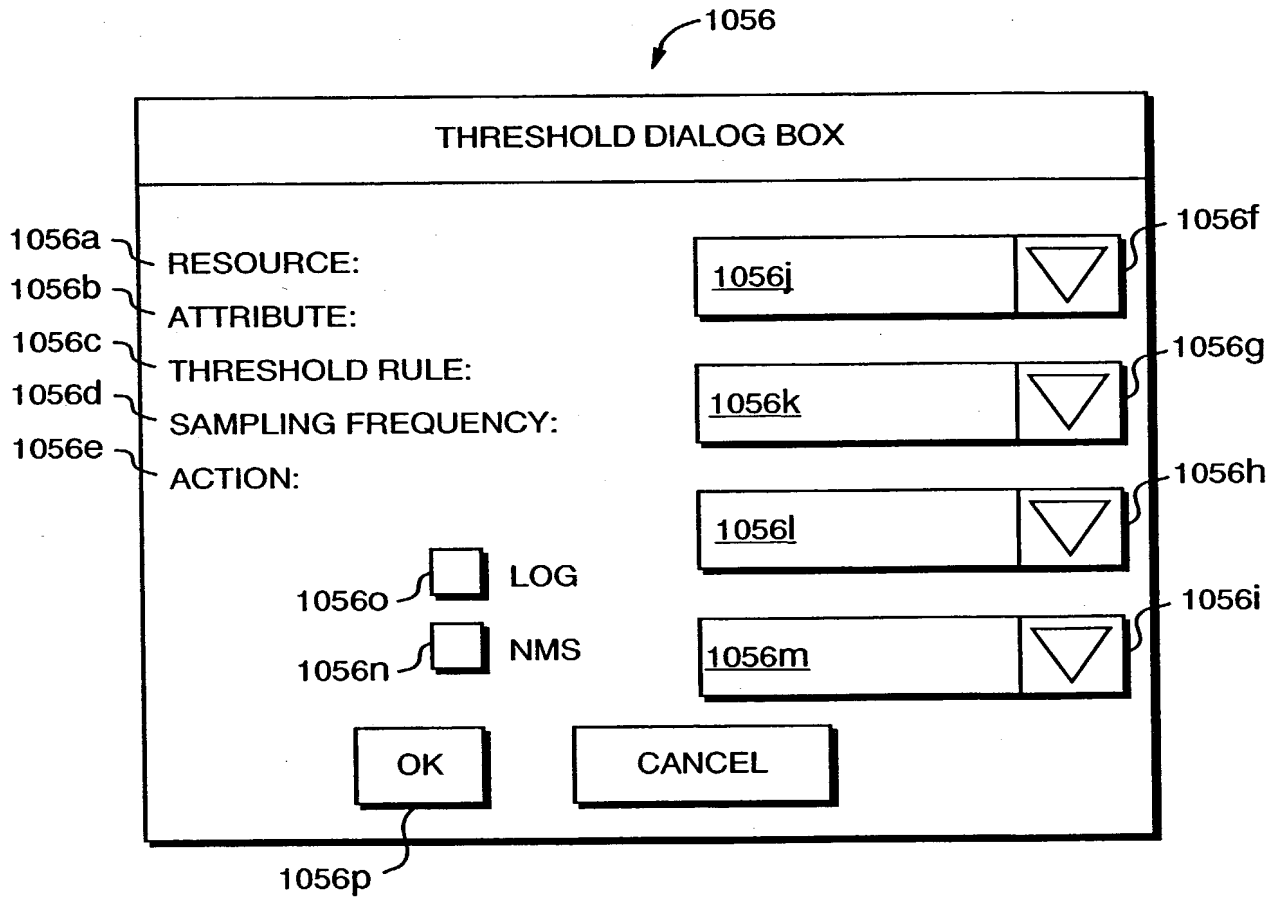

1056
THRESHOLD DIALOG BOX
1056a
RESOURCE:
1056b
ATTRIBUTE:
1056c
THRESHOLD RULE:
1056d
SAMPLING FREQUENCY:
1056e
ACTION:
1056j
1056f
1056k
1056g
1056l
1056h
1056m
1056i
1056o
LOG
1056n
NMS
OK
CANCEL
1056p

FIG. 67

DYNAMIC THRESHOLD TABLE 1048

1048a RESOURCE ID	ATTRIBUTE	1048c SAMPLING FREQ.	1048d ACTION	1048e RULE
1048g 901	UNAVAILABLE SECONDS (PATH END)	15 min	LOG	IF ATTRIBUTE > 10
901	PATH ERRORS (PATH END)	15 min	TRAP	IF ATTRIBUTE < 5 OR >10
901	PATH ERRORS (PATH END)	5 min	LOG & TRAP	IF ATTRIBUTE < 5 OR >10
⋮	⋮	⋮	⋮	⋮
5054	FAILED CALL ATTEMPTS	10 min	TRAP	IF ATTRIBUTE > 8 BETWEEN 8:00am-7:00pm OR > 2 BETWEEN 7:00pm-8:00am
1048h 5054	HCS ERRORS	12 min	TRAP	IF ATTRIBUTE > 13
⋮	⋮	⋮	⋮	⋮
7312	RX TRAFFIC	1 HOUR	TRAP	IF ATTRIBUTE < 4
7312	TX TRAFFIC	1 HOUR	TRAP	IF ATTRIBUTE = 0
	⋮	⋮	⋮	⋮

FIG. 68

DYNAMIC THRESHOLD TABLE 1048'

1048a' THR. GROUP LID	1048b' RESOURCE	1048c' ATTRIBUTE	1048d' SAMPLING FREQ.	1048e' ACTION	1048f' RULE
8312	SONET PATH	UNAVAILABLE SECONDS (PATH END)	15 min	LOG	IF ATTRIBUTE > 10
8312	SONET PATH	PATH ERRORS (PATH END)	15 min	TRAP	IF ATTRIBUTE < 5 OR >10
8312	SONET PATH	PATH ERRORS (FAR END)	5 min	LOG & TRAP	IF ATTRIBUTE < 5 OR >10
• • •	• • •	• • •	• • •	• • •	• • •
8433	ATM IF	FAILED CALL ATTEMPTS	10 min	TRAP	IF ATTRIBUTE > 8 BETWEEN 8:00am-7:00pm OR > 2 BETWEEN 7:00pm-8:00am
8433	ATM IF	HCS ERRORS	12 min	TRAP	IF ATTRIBUTE > 13
• • •	• • •	• • •	• • •	• • •	• • •
8542	VIRTUAL CONN.	Rx TRAFFIC	1 HOUR	TRAP	IF ATTRIBUTE < 4
8542	VIRTUAL CONN.	Tx TRAFFIC	1 HOUR	TRAP	IF ATTRIBUTE = 0
	• • •	• • •	• • •	• • •	• • •

FIG. 69A

THRESHOLD GROUP TABLE 1052

1052a RESOURCE ID	THRESHOLD GROUP LID 1052b
901	8312
902	8313
903	8312
• • •	• • •
5054	8433
• • •	• • •
7312	8542

FIG. 69B

DYNAMIC THRESHOLD TABLE 1048''

1048a'' THR. GROUP LID	1048b'' RESOURCE	1048c'' ATTRIBUTE	1048d'' SAMPLING FREQ.	1048e'' ACTION	1048f'' RULE LID	1048g'' VARIAB. a	1048h'' VARIAB. b	1048i'' VARIAB. c	1048j'' VARIAB. d	VARIAB. e	1048k'' VARIAB. f	1048l'' ...	1048t'' VARIAB. n
8312	SONET PATH	UNAVAILABLE SECONDS (PATH END)	15 min	LOG	9421	10							
8312	SONET PATH	PATH ERRORS (PATH END)	15 min	TRAP	9422	5	10						
8312	SONET PATH	PATH ERRORS (FAR END)	5 min	LOG & TRAP	9422	5	10						
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
8433	ATM IF	FAILED CALL ATTEMPTS	10 min	TRAP	9423	8	8:00am	7:00pm	2	7:00pm	8:00am		
8433	ATM IF	HCS ERRORS	12 min	TRAP	9421	13							
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
8542	VIRTUAL CONN.	RX TRAFFIC	1 HOUR	TRAP	9424	4							
8542	VIRTUAL CONN.	TX TRAFFIC	1 HOUR	TRAP	9425								
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

1048u''

1048v''

FIG. 70A

THRESHOLD RULE TABLE 1050

1050a RULE LID	EXPRESSION 1050b
1050c 9421	IF ATTRIBUTE > a
9422	IF ATTRIBUTE < a OR > b
9423	IF ATTRIBUTE > a BETWEEN b-c OR > d BETWEEN e-f
9424	IF ATTRIBUTE < a
9425	IF ATTRIBUTE = 0
9426	RMON
9427	FOE
9428	IF ATTRIBUTE < a GO TO RULE LID b
• • •	• • •

FIG. 70B

DYNAMIC THRESHOLD TABLE 1048'''

	1048a''' THR. GROUP LID	1048b''' RESOURCE	1048c''' ATTRIBUTE	1048d''' SAMPLING FREQ.	1048e''' ACTION	1048f''' RULE LID	1048g''' VARIAB. a	1048h''' VARIAB. b	1048i''' VARIAB. c	1048j''' VARIAB. d	1048k''' VARIAB. e	1048l''' VARIAB. f	...	1048t''' VARIAB. n	1048w''' ACTIVE/ INACTIVE
1048u'''	8312	SONET PATH	UNAVAILABLE SECONDS (PATH END)	15 min	LOG	9421	10								
	8312	SONET PATH	PATH ERRORS (PATH END)	15 min	TRAP	9422	5	10							
	8312	SONET PATH	PATH ERRORS (FAR END)	5 min	LOG & TRAP	9422	5	10							
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
	8433	ATM IF	FAILED CALL ATTEMPTS	10 min	TRAP	9423	8	8:00am	7:00pm	2	7:00pm	8:00am			
1048v'''	8433	ATM IF	HCS ERRORS	12 min	TRAP	9421	13								
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
	8542	VIRTUAL CONN.	RX TRAFFIC	1 HOUR	TRAP	9424	4								
	8542	VIRTUAL CONN.	TX TRAFFIC	1 HOUR	TRAP	9425									
		⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
1048x'''	8588	HARD DRIVE	UNUSED DISK SPACE	5 min	LOG	9428	80	9424							ACTIVE
1048y'''	8588	HARD DRIVE	UNUSED DISK SPACE	30 sec	TRAP	9424	20								INACTIVE

FIG. 71

102689-85
272/289

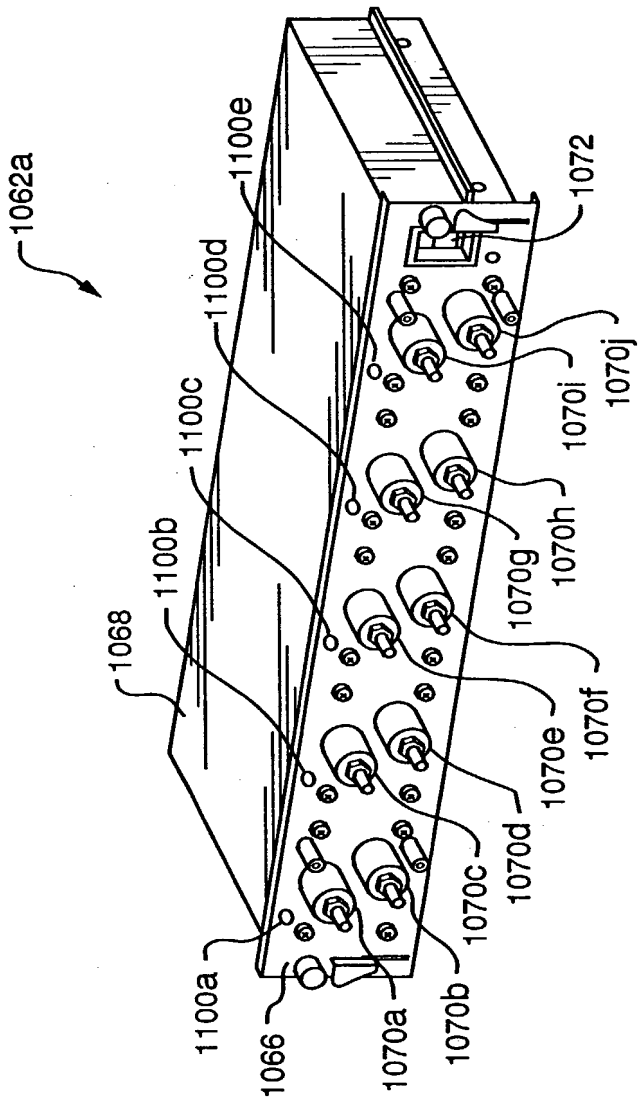

1062a
1100e
1072
1100d
1070j
1070i
1100c
1070h
1070g
1100b
1068
1070f
1070e
1070d
1070c
1100a
1066
1070a
1070b

FIG. 72A

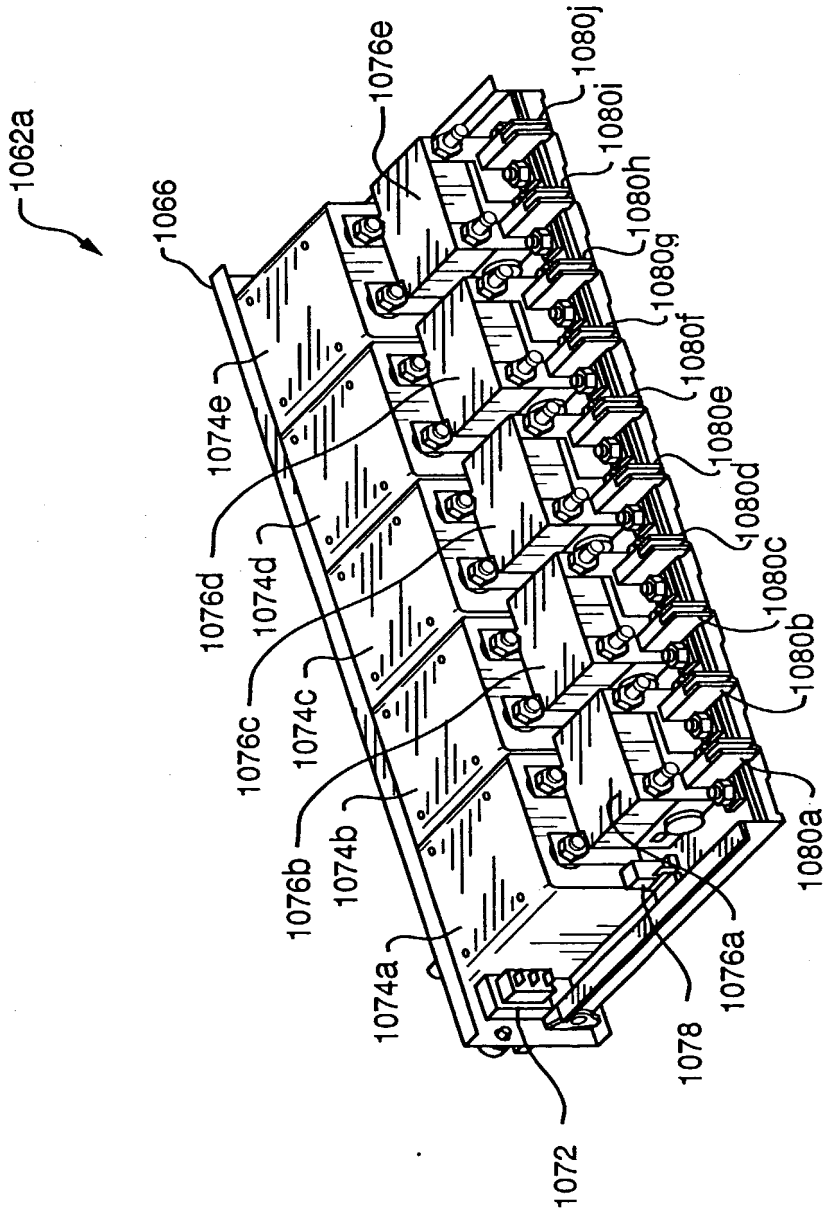

1062a
1066
1076e
1080j
1080i
1080h
1080g
1080f
1080e
1080d
1080c
1080b
1080a
1074e
1076d
1074d
1076c
1074c
1076b
1074b
1074a
1076a
1078
1072

FIG. 72B

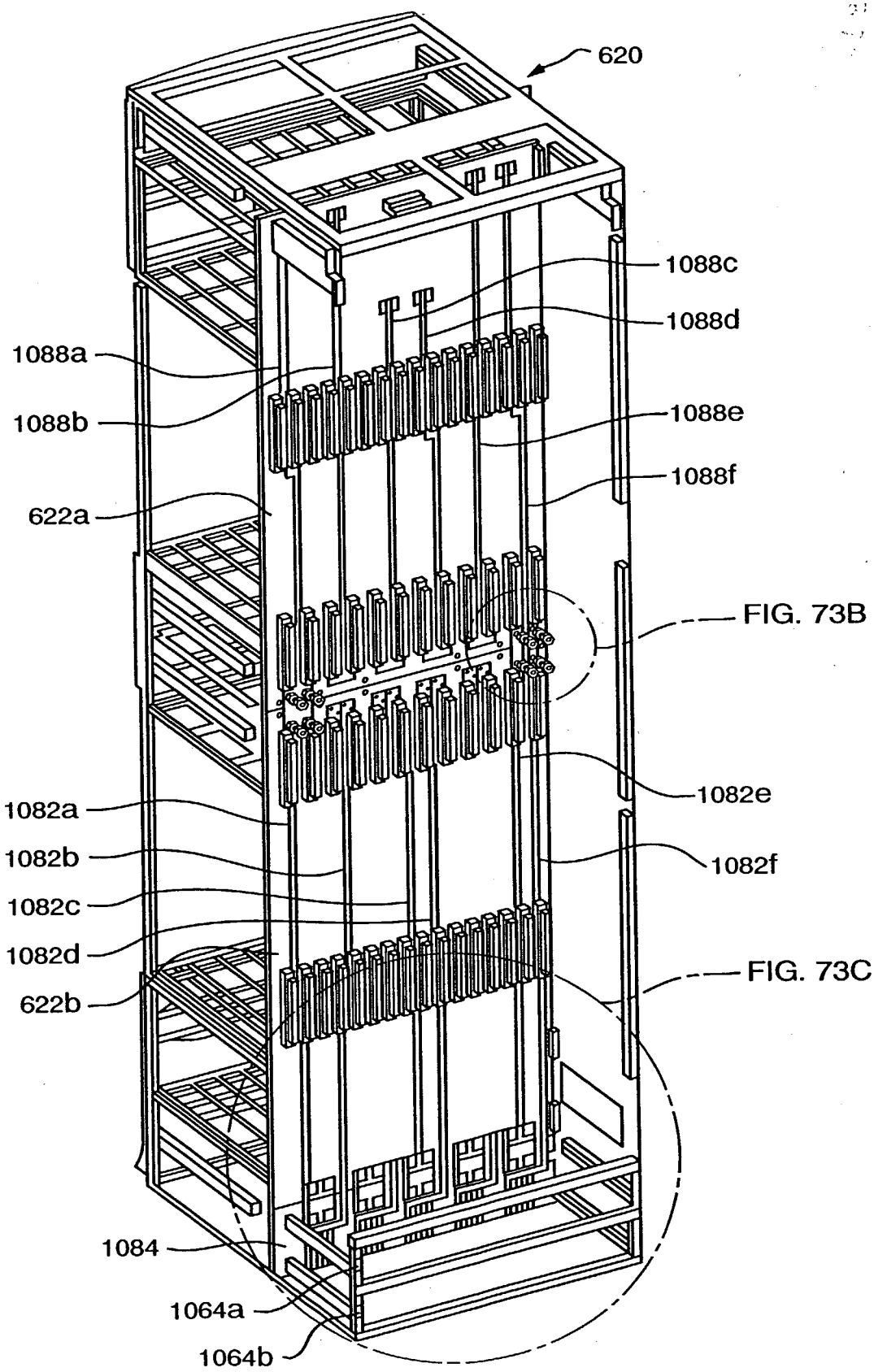

620
1088c
1088d
1088a
1088b
1088e
1088f
622a
FIG. 73B
1082e
1082a
1082b
1082f
1082c
1082d
FIG. 73C
622b
1084
1064a
1064b

FIG. 73A

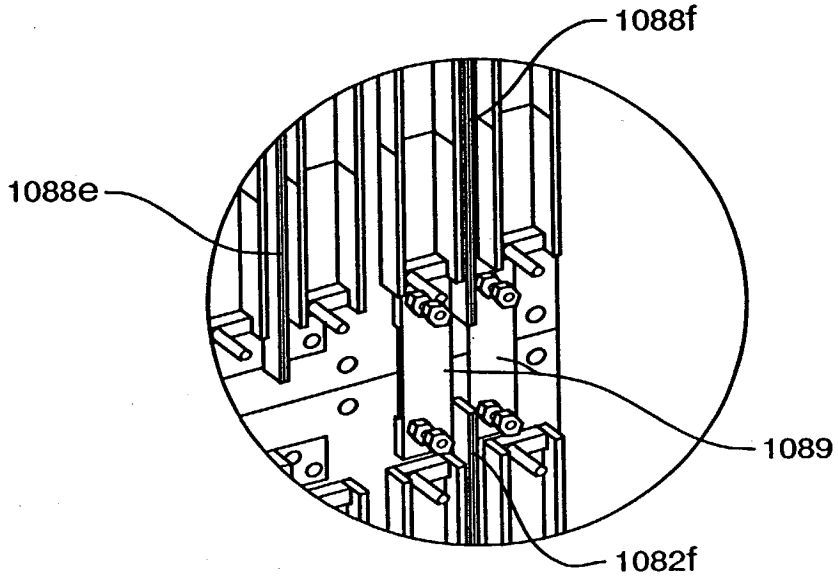


FIG. 73B

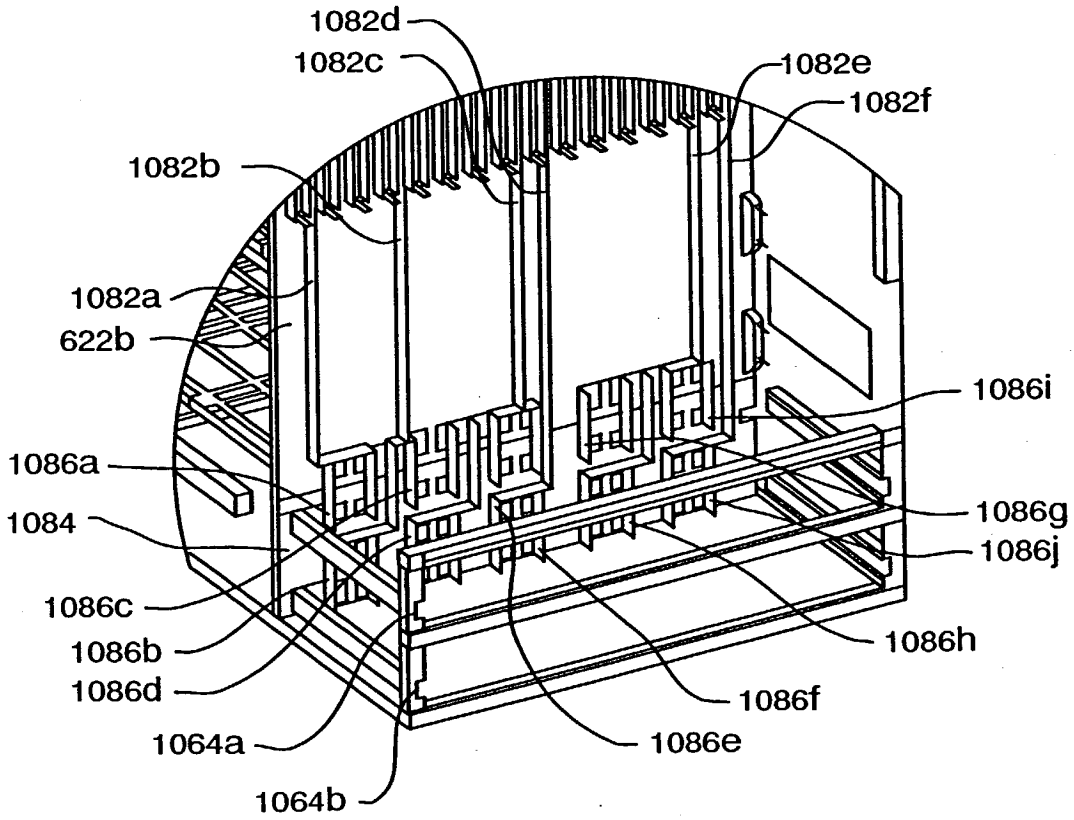


FIG. 73C

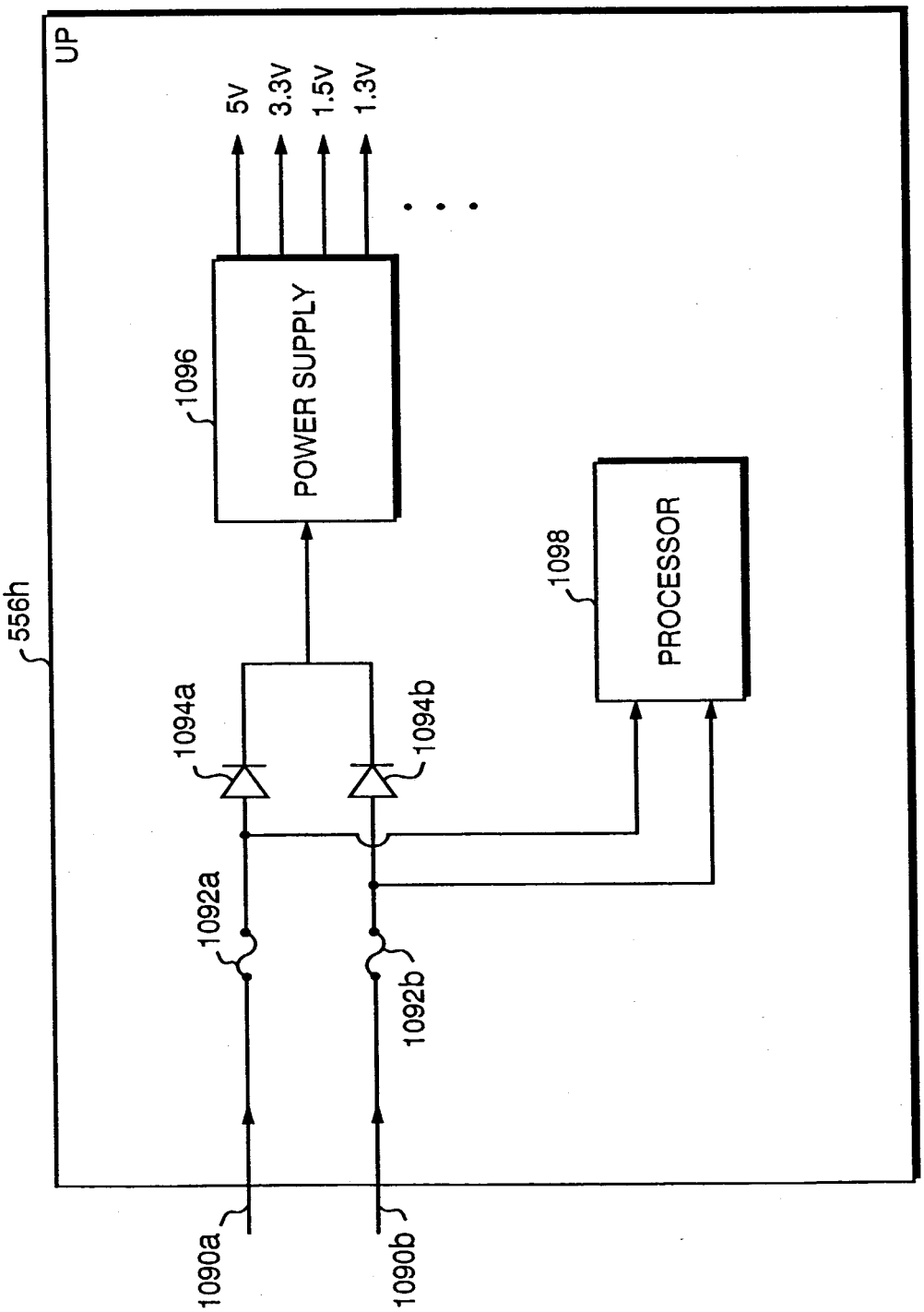

UP
5V
3.3V
1.5V
1.3V
1096
POWER SUPPLY
1098
PROCESSOR
556h
1094a
1094b
1092a
1092b
1090a
1090b

FIG. 74

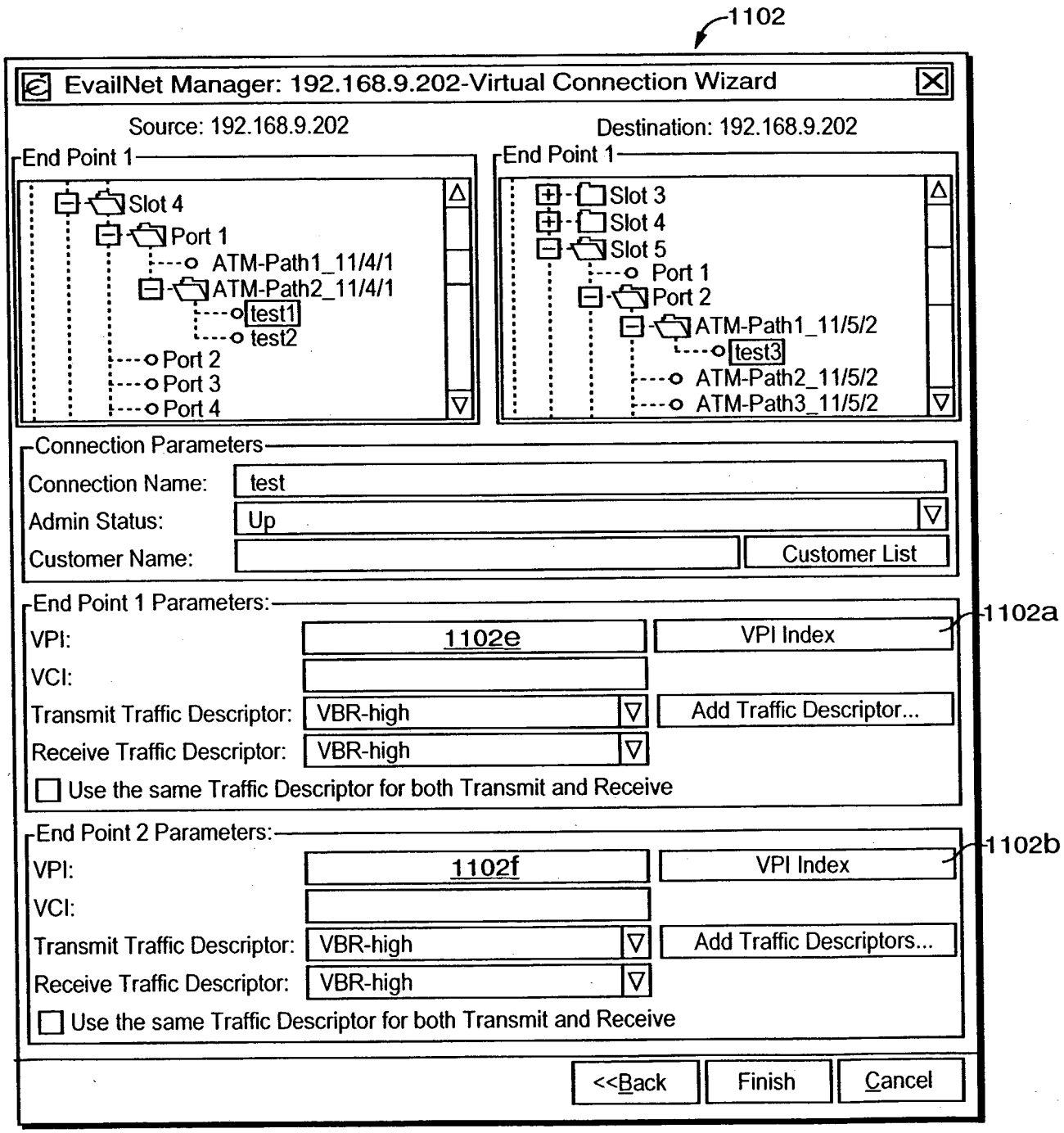

1102
EvailNet Manager: 192.168.9.202-Virtual Connection Wizard
Source: 192.168.9.202
Destination: 192.168.9.202
End Point 1
Slot 4
Port 1
ATM-Path1_11/4/1
ATM-Path2_11/4/1
test1
test2
Port 2
Port 3
Port 4
End Point 1
Slot 3
Slot 4
Slot 5
Port 1
Port 2
ATM-Path1_11/5/2
test3
ATM-Path2_11/5/2
ATM-Path3_11/5/2
Connection Parameters
Connection Name:
test
Admin Status:
Up
Customer Name:
Customer List
End Point 1 Parameters:
1102a
VPI:
1102e
VPI Index
VCI:
Transmit Traffic Descriptor:
VBR-high
Add Traffic Descriptor...
Receive Traffic Descriptor:
VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
End Point 2 Parameters:
1102b
VPI:
1102f
VPI Index
VCI:
Transmit Traffic Descriptor:
VBR-high
Add Traffic Descriptors...
Receive Traffic Descriptor:
VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
<<Back
Finish
Cancel

FIG. 75

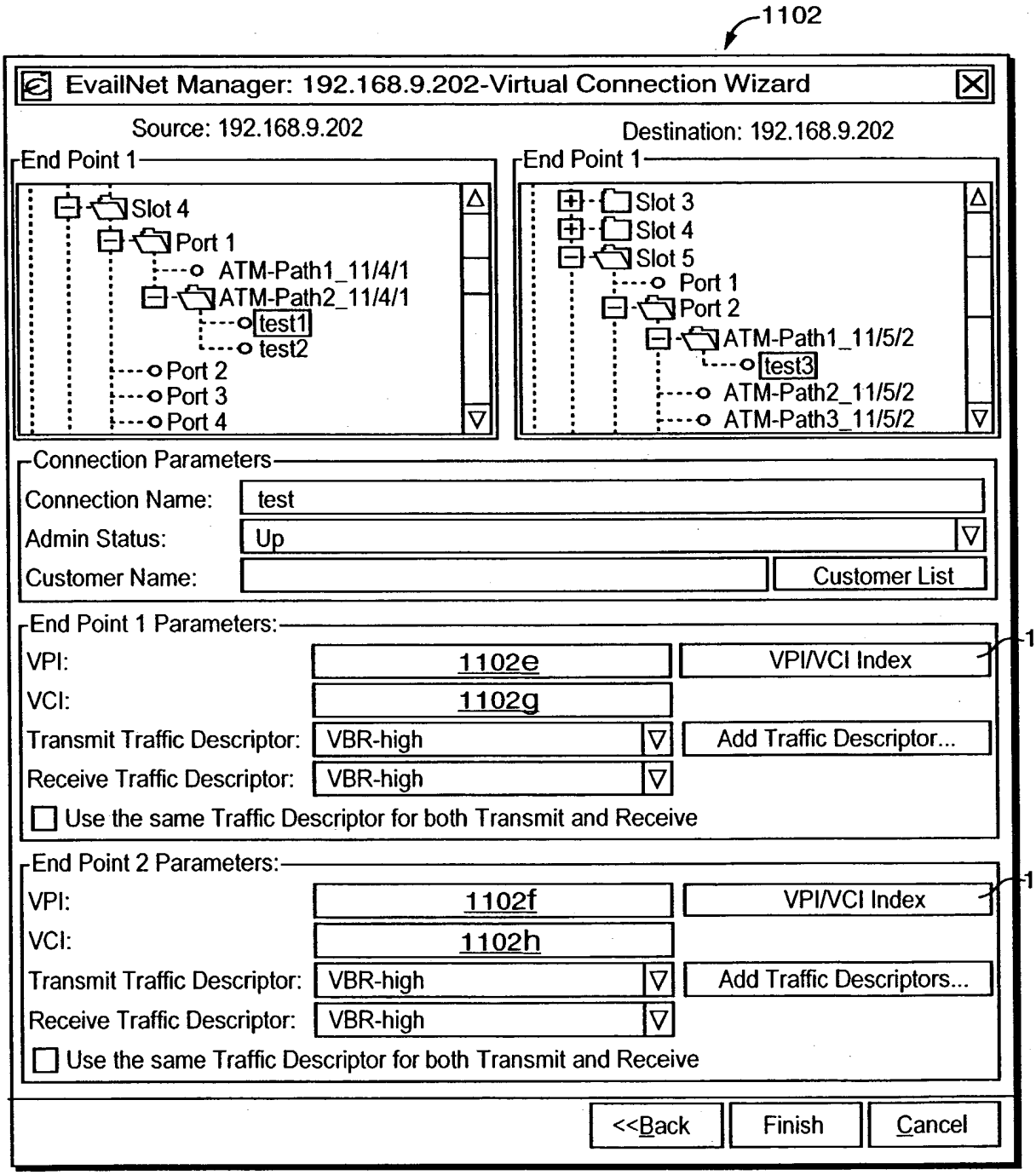

1102
EvailNet Manager: 192.168.9.202-Virtual Connection Wizard
Source: 192.168.9.202
Destination: 192.168.9.202
End Point 1
Slot 4
Port 1
ATM-Path1_11/4/1
ATM-Path2_11/4/1
test1
test2
Port 2
Port 3
Port 4
End Point 1
Slot 3
Slot 4
Slot 5
Port 1
Port 2
ATM-Path1_11/5/2
test3
ATM-Path2_11/5/2
ATM-Path3_11/5/2
Connection Parameters
Connection Name: test
Admin Status: Up
Customer Name:
Customer List
End Point 1 Parameters:
VPI: 1102e
VPI/VCI Index
1102c
VCI: 1102g
Transmit Traffic Descriptor: VBR-high
Add Traffic Descriptor...
Receive Traffic Descriptor: VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
End Point 2 Parameters:
VPI: 1102f
VPI/VCI Index
1102d
VCI: 1102h
Transmit Traffic Descriptor: VBR-high
Add Traffic Descriptors...
Receive Traffic Descriptor: VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
<<Back
Finish
Cancel

FIG. 76

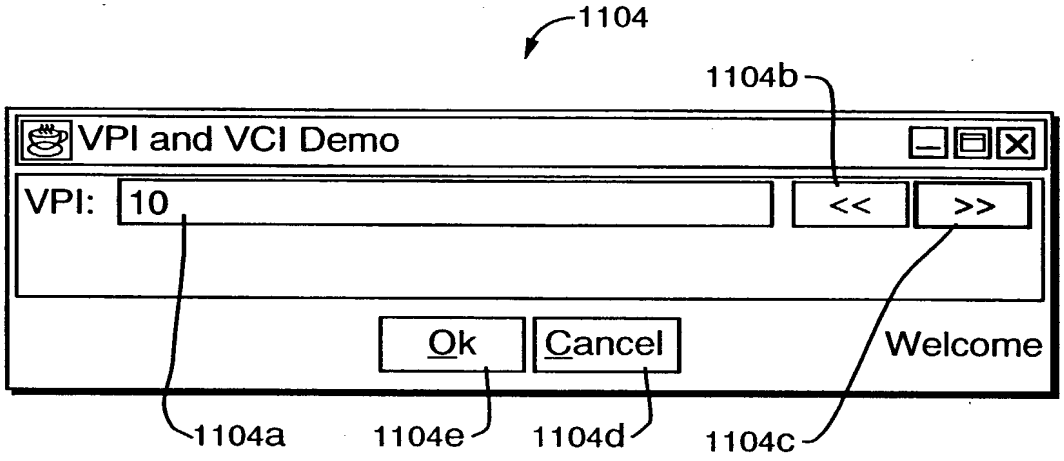

1104
1104b
VPI and VCI Demo
VPI:
10
<<
>>
Ok
Cancel
Welcome
1104a
1104e
1104d
1104c

FIG. 77

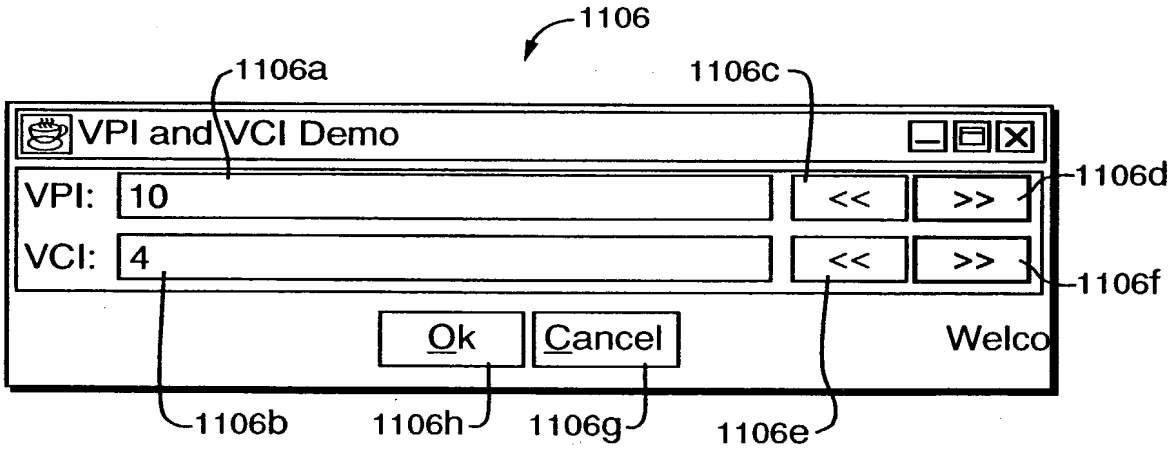

1106
1106a
1106c
VPI and VCI Demo
VPI:
10
VCI:
4
<<
>>
1106d
1106f
Ok
Cancel
Welco
1106b
1106h
1106g
1106e

FIG. 78

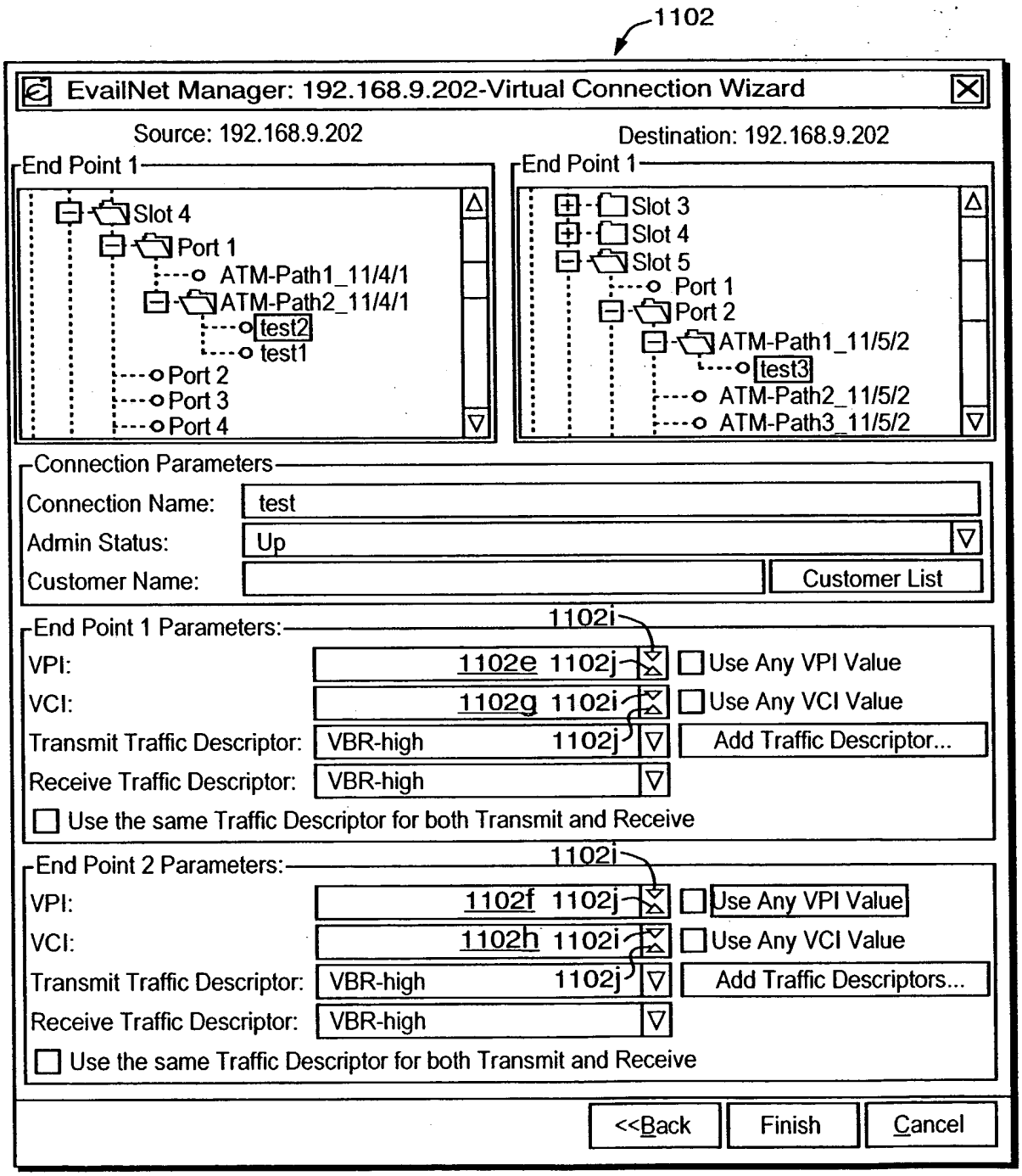

1102
EvailNet Manager: 192.168.9.202-Virtual Connection Wizard
Source: 192.168.9.202
Destination: 192.168.9.202
End Point 1
Slot 4
Port 1
ATM-Path1_11/4/1
ATM-Path2_11/4/1
test2
test1
Port 2
Port 3
Port 4
End Point 1
Slot 3
Slot 4
Slot 5
Port 1
Port 2
ATM-Path1_11/5/2
test3
ATM-Path2_11/5/2
ATM-Path3_11/5/2
Connection Parameters
Connection Name:
test
Admin Status:
Up
Customer Name:
Customer List
End Point 1 Parameters:
1102i
VPI:
1102e 1102j
Use Any VPI Value
VCI:
1102g 1102i
Use Any VCI Value
Transmit Traffic Descriptor:
VBR-high
1102j
Add Traffic Descriptor...
Receive Traffic Descriptor:
VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
End Point 2 Parameters:
1102i
VPI:
1102f 1102j
Use Any VPI Value
VCI:
1102h 1102i
Use Any VCI Value
Transmit Traffic Descriptor:
VBR-high
1102j
Add Traffic Descriptors...
Receive Traffic Descriptor:
VBR-high
Use the same Traffic Descriptor for both Transmit and Receive
<<Back
Finish
Cancel

FIG. 79

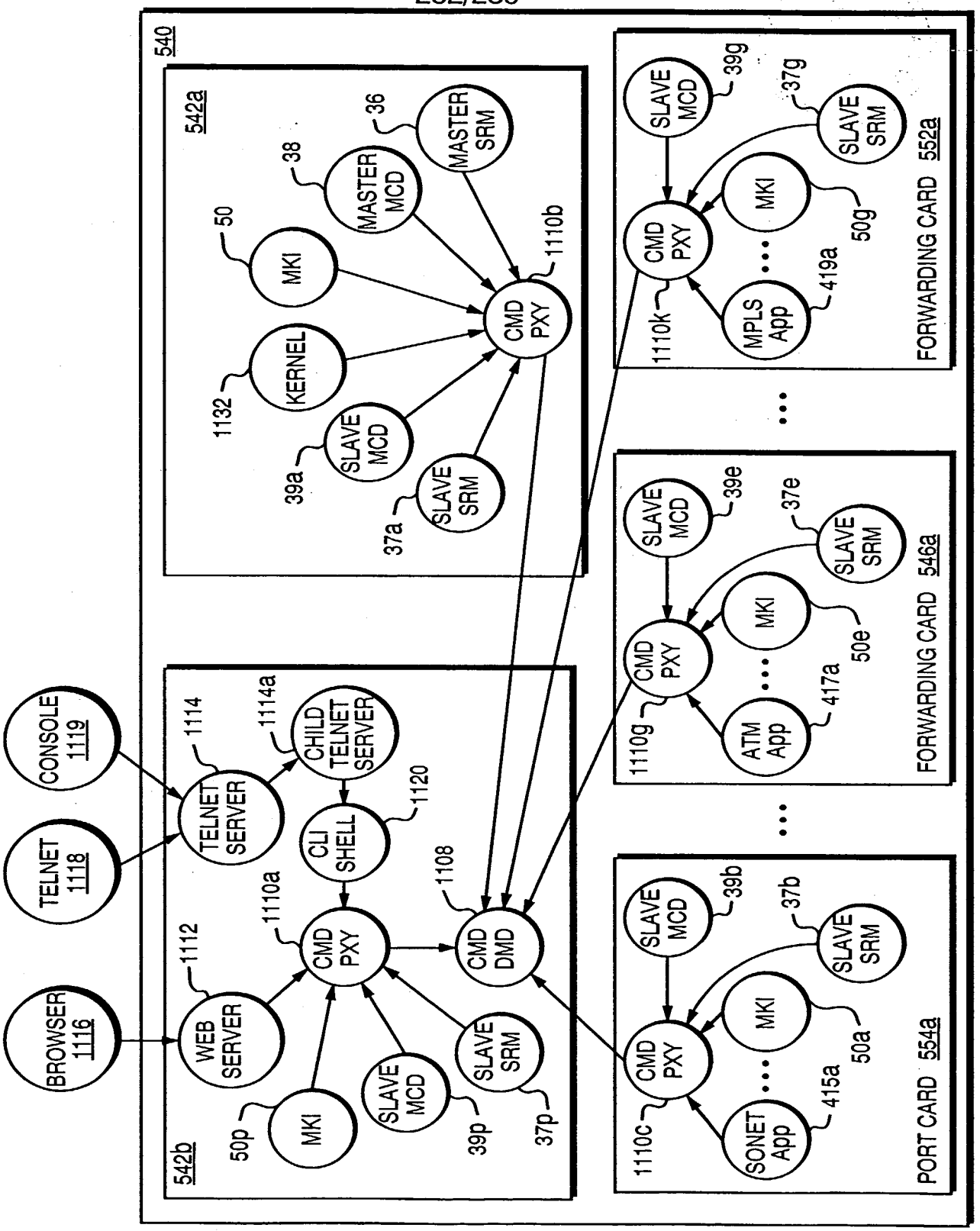

540
542a
542b
CONSOLE 1119
TELNET 1118
BROWSER 1116
TELNET SERVER
1114
1114a
CHILD TELNET SERVER
CLI SHELL
1120
WEB SERVER
1112
1110a
CMD PXY
CMD DMD
1108
MKI
50p
SLAVE MCD
39p
SLAVE SRM
37p
KERNEL
1132
MKI
50
MASTER MCD
38
MASTER SRM
36
CMD PXY
1110b
SLAVE MCD
39a
SLAVE SRM
37a
PORT CARD 554a
1110c
CMD PXY
SLAVE MCD
39b
SLAVE SRM
37b
MKI
50a
SONET App
415a
FORWARDING CARD 546a
1110g
CMD PXY
SLAVE MCD
39e
SLAVE SRM
37e
MKI
50e
ATM App
417a
FORWARDING CARD 552a
1110k
CMD PXY
SLAVE MCD
39g
SLAVE SRM
37g
MKI
50g
MPLS App
419a

FIG. 80

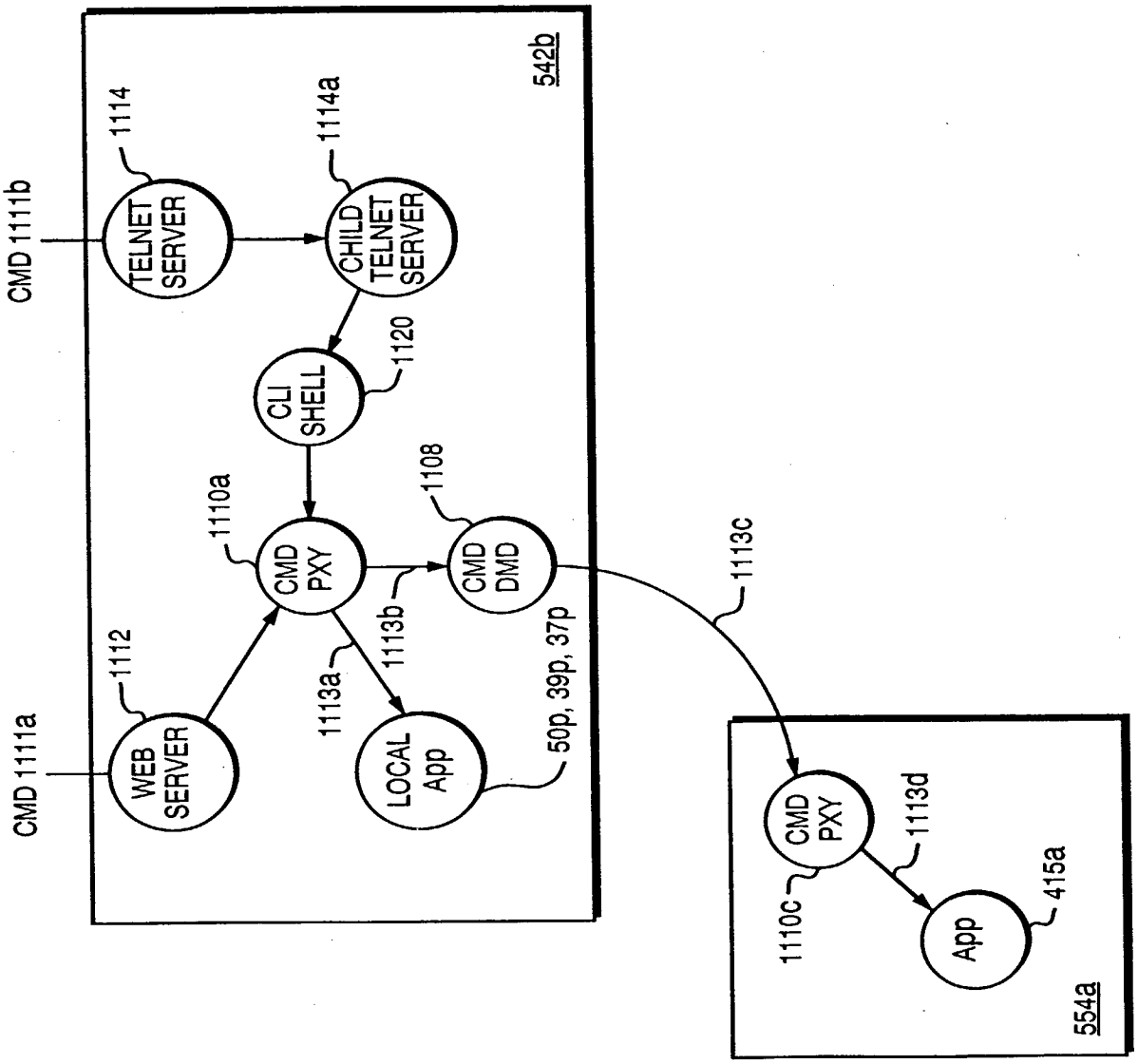

CMD 1111b
CMD 1111a
TELNET SERVER
1114
CHILD TELNET SERVER
1114a
CLI SHELL
1120
CMD PXY
1110a
CMD DMD
1108
WEB SERVER
1112
LOCAL App
1113a
1113b
50p, 39p, 37p
542b
1113c
CMD PXY
1110c
1113d
App
415a
554a

FIG. 81

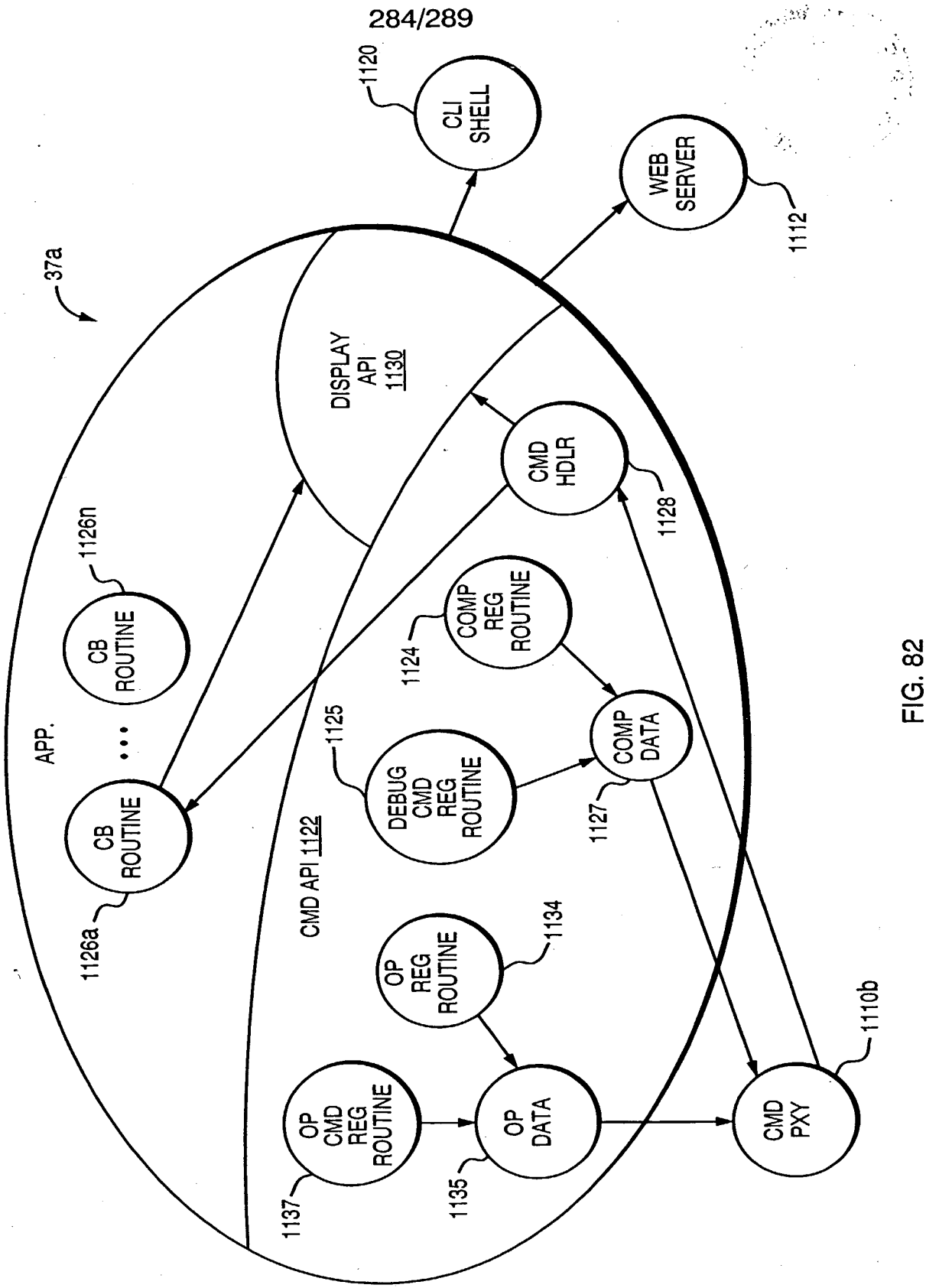

284/289
37a
APP.
CB ROUTINE
1126a
CB ROUTINE
1126n
CMD API 1122
DISPLAY API 1130
CLI SHELL
1120
WEB SERVER
1112
CMD HDLR
1128
COMP REG ROUTINE
1124
DEBUG CMD REG ROUTINE
1125
COMP DATA
1127
OP REG ROUTINE
1134
OP CMD REG ROUTINE
1137
OP DATA
1135
CMD PXY
1110b

FIG. 82

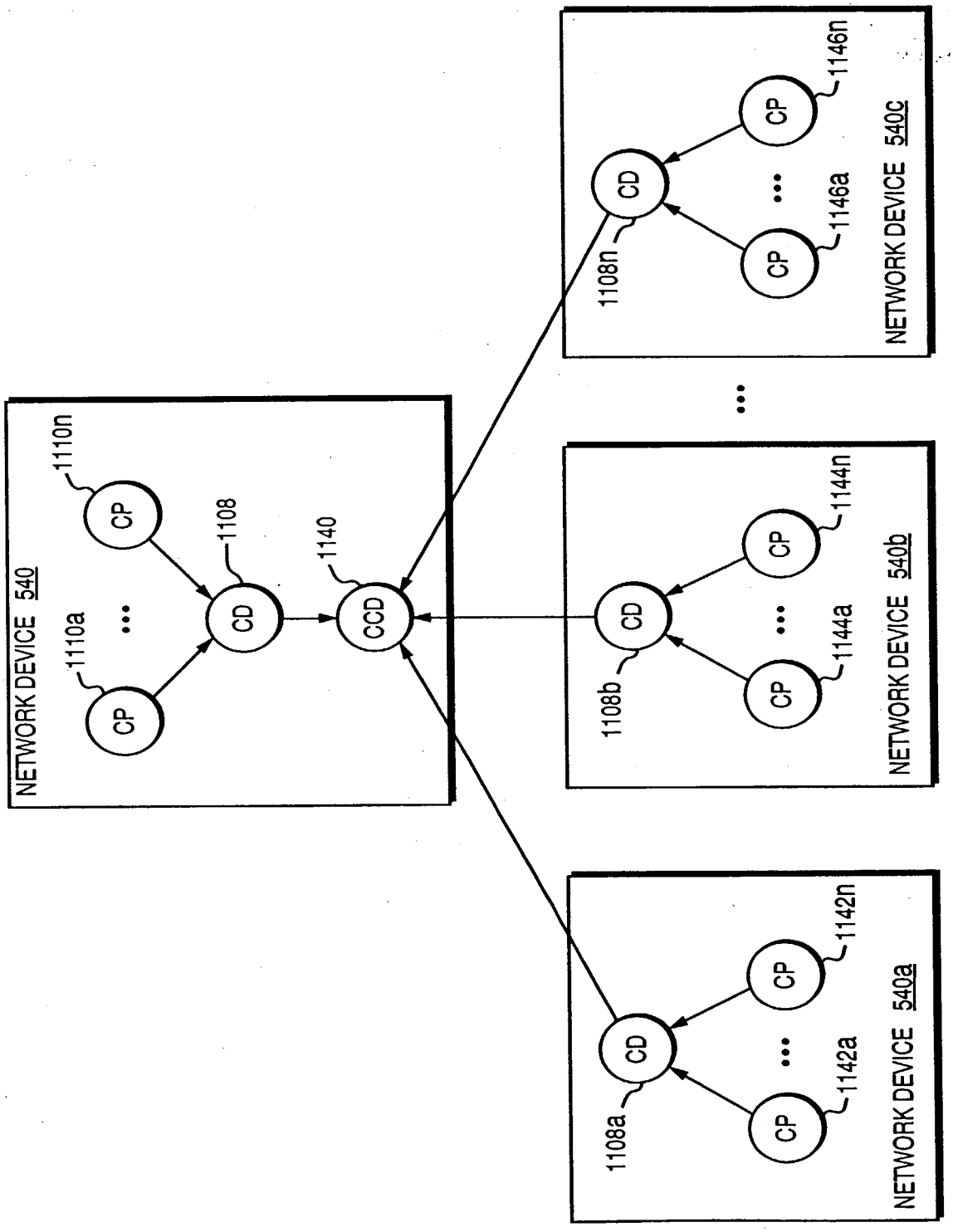

NETWORK DEVICE 540
1110a
1110n
CP
CP
CD
1108
1140
CCD
NETWORK DEVICE 540a
1108a
CD
CP
CP
1142a
1142n
NETWORK DEVICE 540b
1108b
CD
CP
CP
1144a
1144n
NETWORK DEVICE 540c
1108n
CD
CP
CP
1146a
1146n

FIG. 83

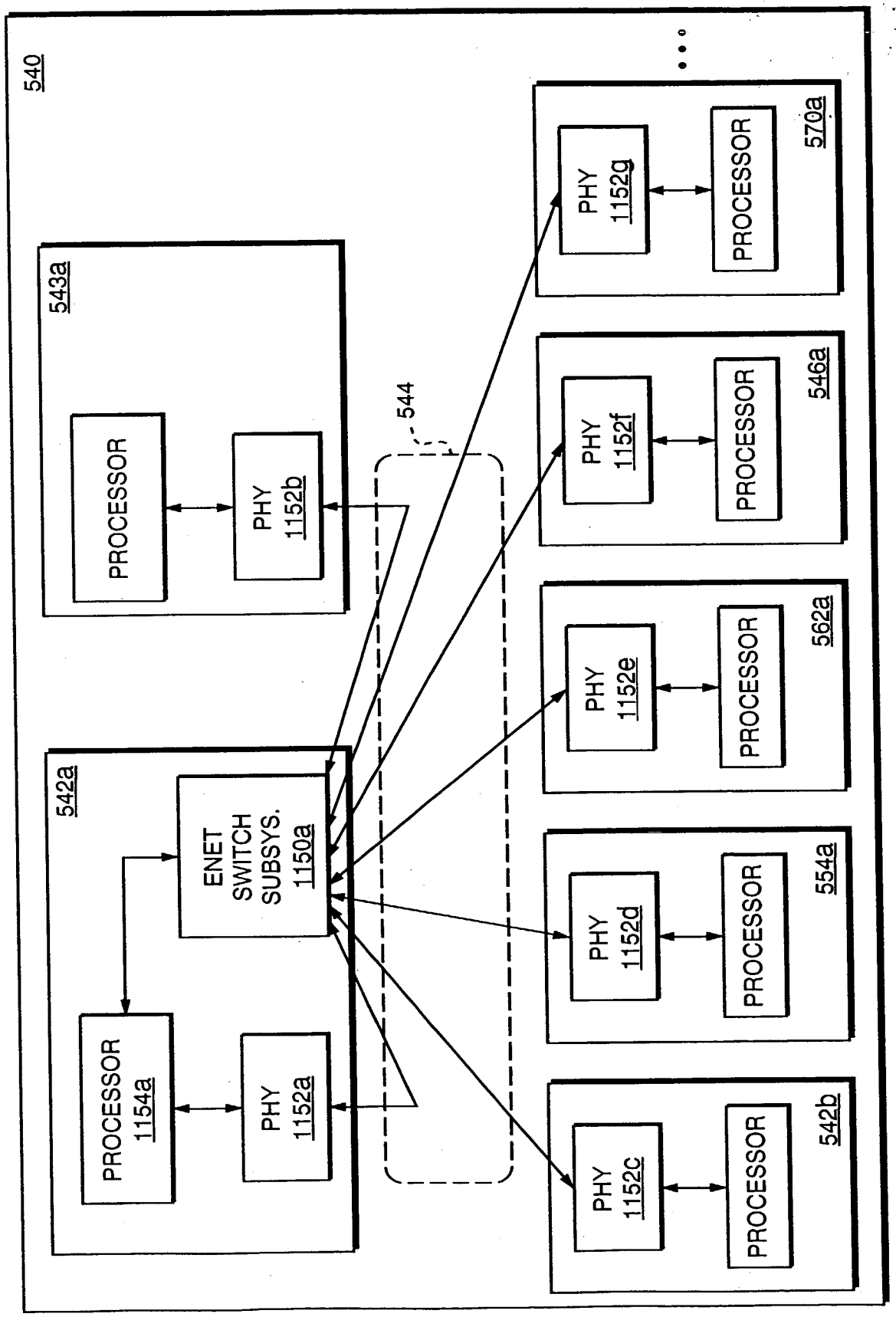

540
543a
PROCESSOR
PHY 1152b
544
542a
ENET SWITCH SUBSYS. 1150a
PROCESSOR 1154a
PHY 1152a
570a
PHY 1152g
PROCESSOR
546a
PHY 1152f
PROCESSOR
562a
PHY 1152e
PROCESSOR
554a
PHY 1152d
PROCESSOR
542b
PHY 1152c
PROCESSOR

FIG. 84

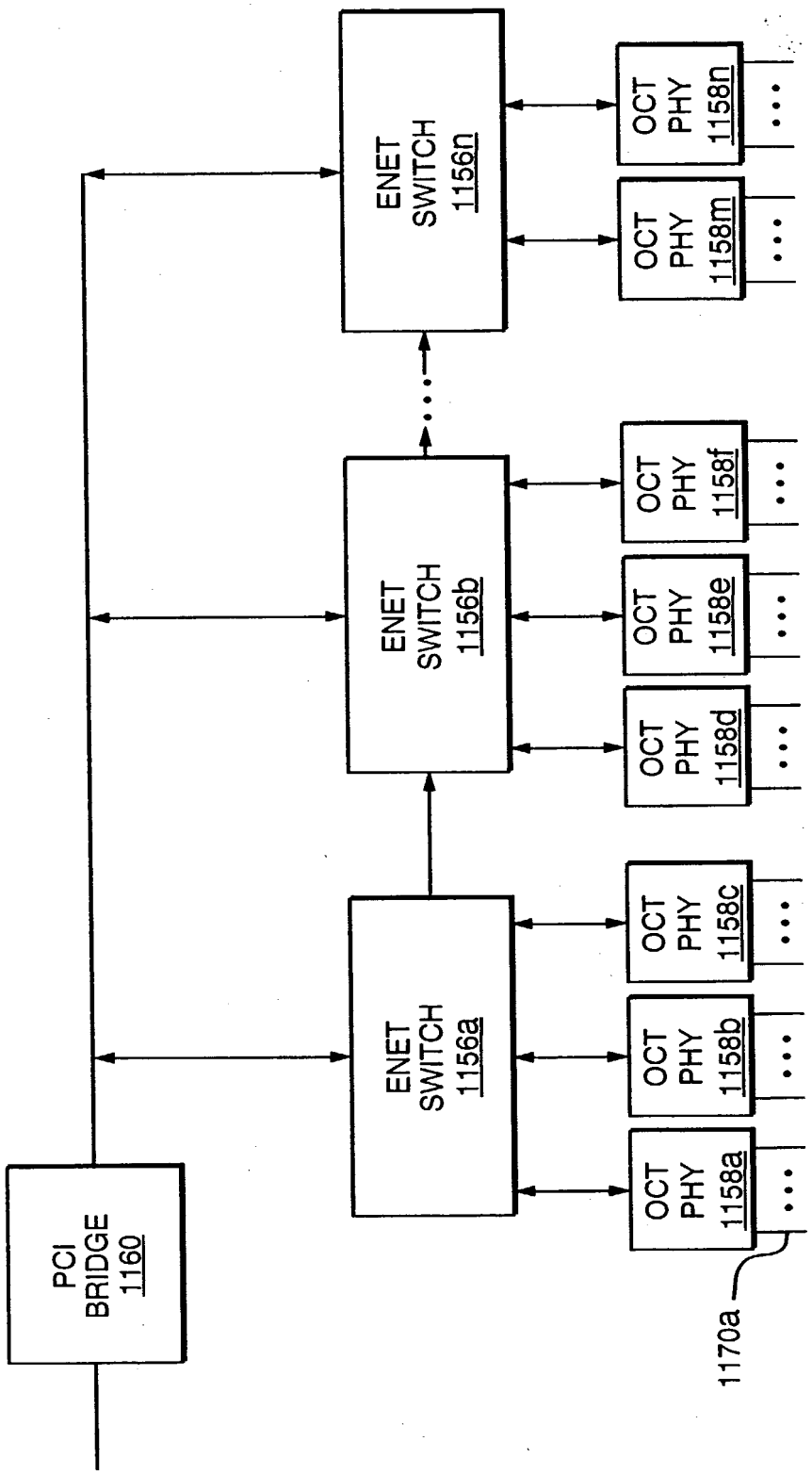

1150a
PCI BRIDGE 1160
ENET SWITCH 1156a
ENET SWITCH 1156b
ENET SWITCH 1156n
OCT PHY 1158a
OCT PHY 1158b
OCT PHY 1158c
OCT PHY 1158d
OCT PHY 1158e
OCT PHY 1158f
OCT PHY 1158m
OCT PHY 1158n
1170a

FIG. 85

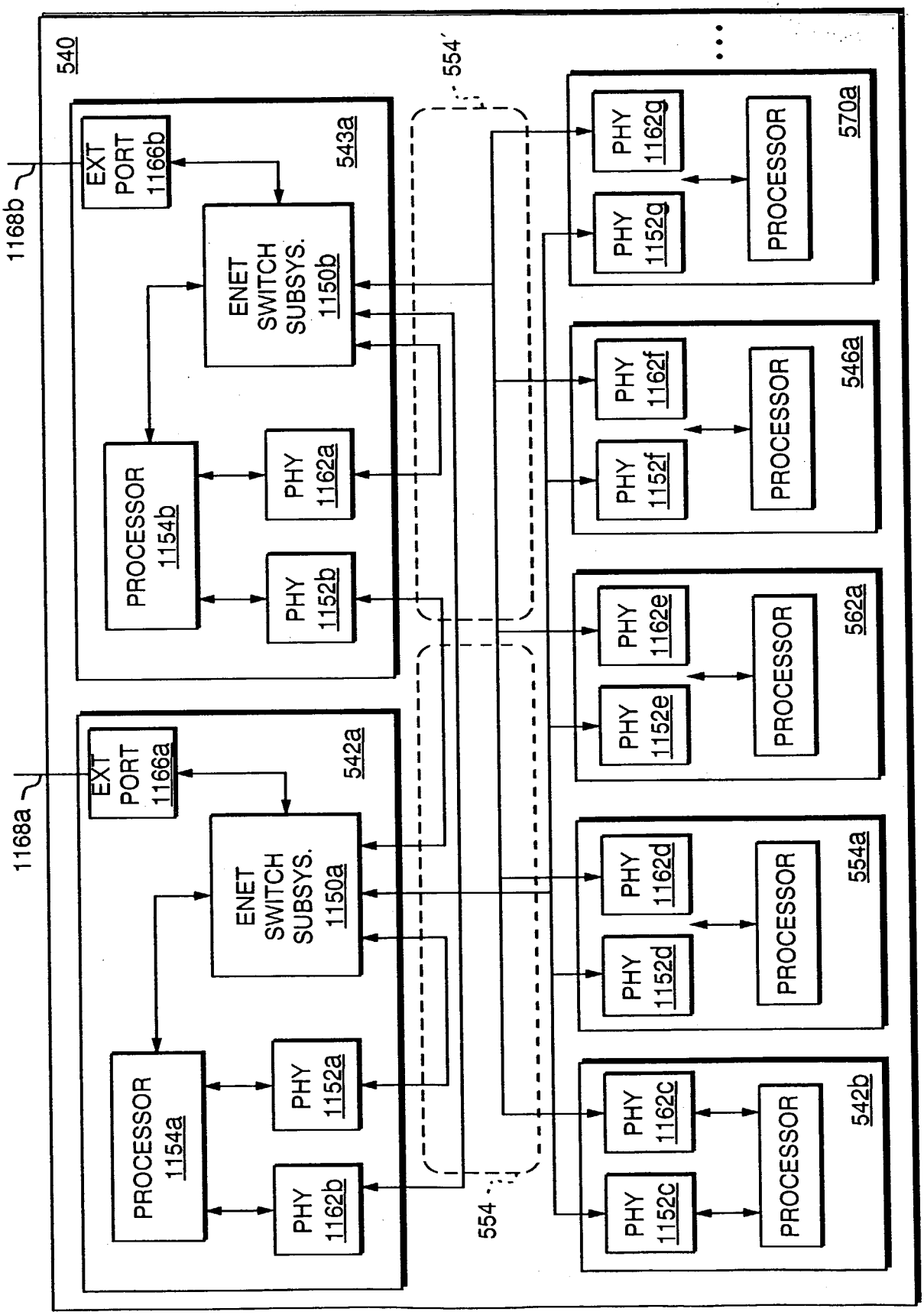

540
554'
1168b
EXT PORT 1166b
543a
ENET SWITCH SUBSYS. 1150b
PROCESSOR 1154b
PHY 1162a
PHY 1152b
570a
PHY 1162g
PHY 1152g
PROCESSOR
546a
PHY 1162f
PHY 1152f
PROCESSOR
562a
PHY 1162e
PHY 1152e
PROCESSOR
554a
PHY 1162d
PHY 1152d
PROCESSOR
542b
PHY 1162c
PHY 1152c
PROCESSOR
1168a
EXT PORT 1166a
542a
ENET SWITCH SUBSYS. 1150a
PROCESSOR 1154a
PHY 1152a
PHY 1162b
554

FIG. 86

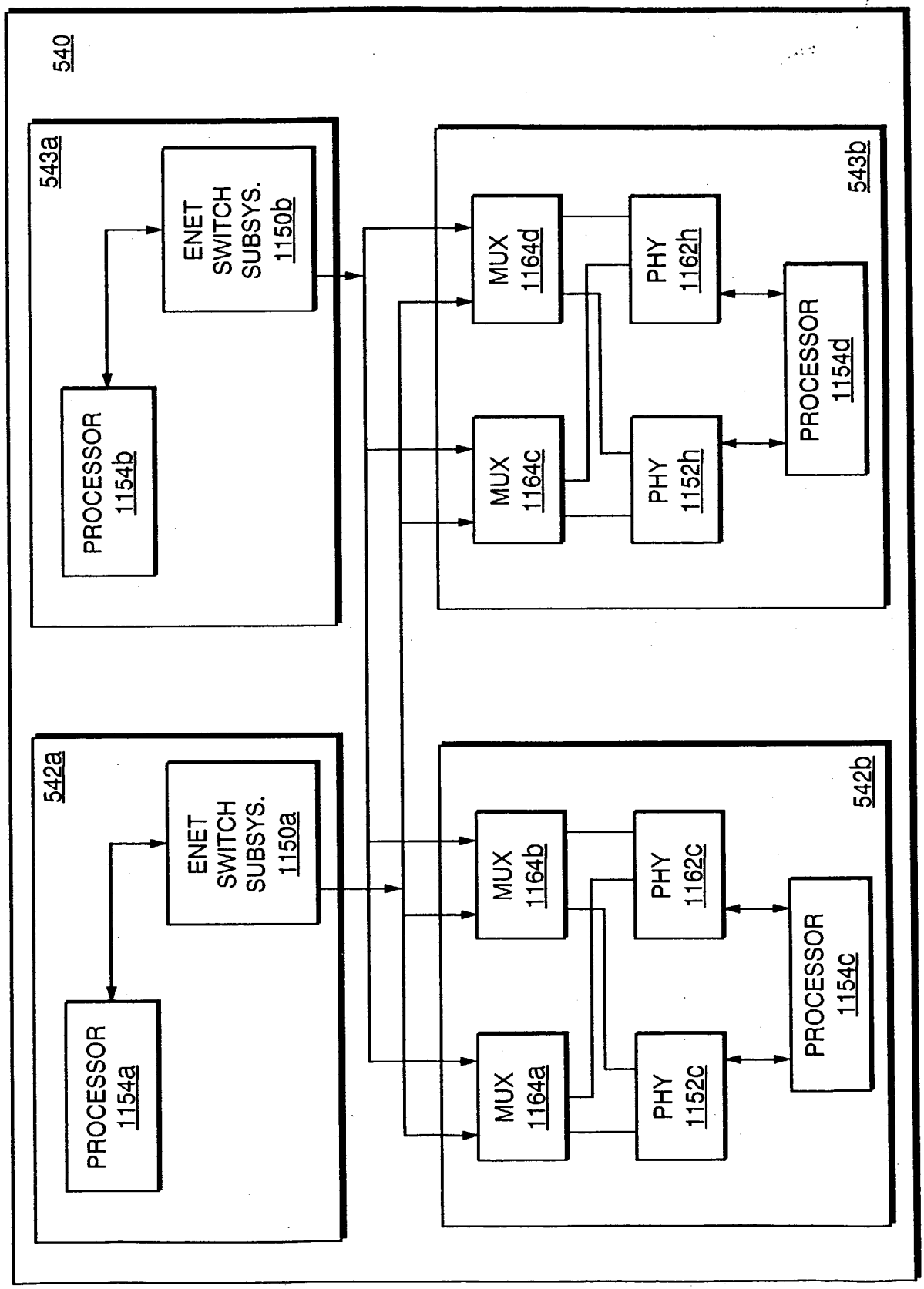

540
543a
ENET SWITCH SUBSYS. 1150b
PROCESSOR 1154b
543b
MUX 1164d
PHY 1162h
MUX 1164c
PHY 1152h
PROCESSOR 1154d
542a
ENET SWITCH SUBSYS. 1150a
PROCESSOR 1154a
542b
MUX 1164b
PHY 1162c
MUX 1164a
PHY 1152c
PROCESSOR 1154c

FIG. 87